BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CLX.] LONDON: SATURDAY, JANUARY 21, 1860. [NEW SERIES.

Lectures
ON THE
SURGERY OF CHILDHOOD.

DELIVERED AT THE HOSPITAL FOR SICK CHILDREN.

By ATHOL A. JOHNSON, Esq., Surgeon to the Hospital.

LECTURE II.

CONGENITAL MALFORMATIONS (*continued*)—*Spina Bifida; its Treatment by Operation, by Collodion; by Iodine injections; Congenital Fatty Tumour of Spine; Deficiency and Excess of parts; Hermaphrodism; of the Male; of the Female.* INJURIES AND ACCIDENTS—*Foreign Bodies in Nose and Ear; Fractures; Peculiarities when complicated with Rickets; Incomplete Fractures; Traumatic separation of Epiphyses.*

GENTLEMEN,—Towards the close of the last lecture, I drew your attention to certain congenital hernial protrusions from the skull, constituting *encephalocele*. In the back we find similar tumours connected with arrest of development in some portion of the spinal column, and formed by the protrusion, through an opening in the canal, of the membranes of the cord, distended with cerebro-spinal fluid. To these the name of *spina bifida* is given, and they are usually characterised by the hard and tense nature of the swelling when the patient is erect, its softness when the pelvis is raised above the head; expiration and inspiration producing frequently the same effect. As in the skull, however, the hernia is seldom that of the membranes alone; in the majority of cases, either the spinal cord itself or some of its nerves are more or less involved. Mr. Prescott Hewett, in his valuable remarks on this affection, states, "that of twenty preparations of spina bifida occupying the lumbo-sacral region, which he has examined, he has only found one in which the nerves were not connected with the sac. If the tumour corresponds to the two or three upper lumbar vertebræ only, the cord itself rarely deviates from its course, and the posterior spinal nerves are generally the only branches which have any communication with the sac. But if the tumour occupies partly the lumbar and partly the sacral region, then generally *the cord itself and its nerves* will be found intimately connected with the sac."

On the table is a specimen illustrating this fact, taken from a patient, five months old, who died under the care of Mr. Tatum. The cord and its nerves will be seen running across the cavity of the tumour to its posterior wall, where they are firmly fixed.

I need scarcely mention the importance of this connection as influencing our treatment. Numerous operations, including removal by ligature and excision, have been proposed and performed; in some cases, it is asserted, with beneficial results, but in all, certainly, with great risk to life. Sir A. Cooper, it is well known, was successful in two cases: one of which he treated by simple compression, whilst in the other he evacuated the fluid by puncture with a needle, and subsequently employed pressure. Twenty-eight or twenty-nine years afterwards, the patients were alive and in good health. In both these cases, it may be remarked, the tumour was of moderate size, and seated in the loins; containing, probably, no portion of the spinal cord. With others, however, the results have not been so prosperous; and in a discussion on the subject of spina bifida at the Société de Chirurgie last October, M. Guersant stated that he had tried different operations in fifteen or eighteen cases of this kind, but had never had reason to congratulate himself on the result. Suture, excision, ligature, had been rapidly followed by death; and if puncture and compression had not been so injurious, they had not prevented his little patients from dying at last. He mentioned, however, that he had never employed iodine injections. (*Gazette des Hôpitaux*, October 15th, 1859.)

In the second volume of the *Medical Times and Gazette* for 1858, will be seen an interesting collection of cases of this affection, seventeen in number. On analysing these, I find that in two cases a ligature was applied, and both died. In six cases, the tumour was punctured or wounded, and all six died. In one case, however, the notes of which are brief and imperfect, both ligature and puncture were employed, and recovery is said to have taken place. The results of operative interference, in these cases, at any rate, are not encouraging—eight out of the nine cases having died.

In seven cases, the sac was not meddled with: of these, two died, two were cured, and three remained in good health, at the ages of thirteen, twenty-three, and thirty-two, though with the tumour still present, and of large size. The remaining case I exclude, as it appears not to have been congenital, having been first noticed at the age of twenty-six, after a confinement. I may add, that every case in which I have myself punctured the sac has, sooner or later, terminated fatally.

Should nothing then be done in this affection? An application, which may be used at least with safety, perhaps with advantage, is collodion, painted over the whole surface of the tumour, and for some distance around it. In a case related in the thirty-first volume of the *Journal für Kinderkrankheiten*, this was employed from time to time by Dr. Behrend, the part being afterwards protected by an India-rubber shield; a little calomel was at the same time administered internally, on account of some head symptoms, which happened to show themselves. Absorption of the fluid took place, and the tumour contracted and finally disappeared, leaving only a hardened mass to mark its situation.

Astringents may also be applied in the shape, perhaps, of a strong Goulard lotion, especially when the integuments are thin; or the saturnine salt may be combined with the collodion; in any case, too, the tumour should be protected, but not compressed, by a kind of shield formed of some suitable material.

There is still another mode of treatment which has been specially advocated of late, and which deserves, perhaps, a further trial; I mean injection of iodine into the sac. At the discussion to which I have alluded, M. Velpeau stated that whenever he had had recourse to operations involving any loss of blood, they had always failed; but that on three occasions, he had punctured the tumour and injected iodine. Two of these patients died, but long after the operation; in one of them, the injection was renewed three times in the space of three weeks, and the iodine had not produced the least trace of inflammation. The third child, who is now six years old, was cured, and is still living, five years after the operation. In this case, five or six injections were practised in succession. After the first, the skin over the tumour, which was previously red and almost ulcerated, became more firm and less irritated; the tumour diminished, and was only of the size of a nut when last seen. The fluid injected consisted of tincture of iodine, diluted at first with two-thirds of water, the strength being afterwards increased.

In the *Chicago Medical Journal* for September (quoted in *Boston Medical Journal*, vol. lxi, p. 246), Dr. Brainard is stated to have now treated seven cases in this way; of which five are said to be cured, though one died afterwards of chronic hydrocephalus. The injections, which consisted of iodine and iodide of potassium dissolved in water, were repeated as often as was deemed necessary, the strength of the solution being gradually increased; no more of the fluid, it is remarked, should be drawn off than would correspond to the amount of injection to be introduced. After the operation, collodion is applied, and should be continued for some considerable period. The success in these instances was undoubtedly considerable; though even here, it may be remarked, two at least out of the seven patients actually died; but in truth, the cases are some-

what loosely reported, many important particulars are omitted, and their value consequently is materially diminished.

The conclusions I should draw as to the prognosis and treatment, would be these:—

1. The chances of a favourable result are never very great; and in the worst cases, where the tumour is very much distended and the deficiency of the spinal walls very considerable, where the skin is thinned, and, as it were, unravelled or on the point of bursting, or having actually burst, there is no reasonable hope.

2. Under any circumstances, the strong probability of the presence of a part of the cord or its nerves, and the fatal results of the cases in which such attempts have been made, forbid our having recourse to ligature or to excision.

3. In some cases, especially in those where the vertebral fissure is small, the tumour pediculated, and the communication with the spine limited, there is a chance of a natural cure taking place, or, at any rate, of the tumour not proving incompatible with life, if it is simply protected from external violence.

4. In treating this affection, if the tumour is of moderate size, and not enlarging, I should be unwilling, at first, to do more than apply gentle compression, by means probably of collodion, combined or not with astringents, support the part well, and protect it effectually from injury.

5. Should the tumour show a disposition to increase, I might then make a fair trial of iodine injections, though with a certain amount of foreboding as to the occurrence of inflammation of the spinal membranes. The punctures for this purpose should be made at a part where the skin is healthy and at the side of the tumour; for it is generally at the middle line that the cord and its nerves, if present, are attached. The strength of the solution, which should have been recently prepared, should be about one sixteenth of a grain of iodine, and one-eighth of a grain of iodide of potassium to the drachm of water; the quantity, at first very small, not more, perhaps, than eight or ten drops, which might be introduced by means of the instrument now in use for injecting the perchloride of iron in cases of nævus. After the injection, pressure upon the tumour should be avoided, and if any redness or heat come on, cooling lotions may be used and collodion applied, after the inflammatory symptoms have subsided. Fresh injections should not be had recourse to, so long as any signs of inflammation remain, or till the tumour ceases to contract.

Cases of *spina bifida* are sufficiently common at the lower part of the spine to be familiar to most practitioners, who are, consequently, well acquainted with their nature. They are found, however, also higher up, in the dorsal region and in the neck, cases of which I have seen; but they occur so seldom in this situation, that they may not be recognised, and attempts might be, and have been, made to excise the tumour in ignorance of its real character. It is well, therefore, to be aware of the fact that they may be met with in these regions.

Congenital Fatty Tumour of Spine. I may, perhaps, be allowed here briefly to describe a very unusual form of congenital tumour, connected with arrest of development of the posterior part of the sacrum, which came under my care at this Hospital. The patient was brought to me, three weeks after birth, with an ulcer situated on the top of an ill-defined swelling placed over the sacrum. The ulcer healed; but the swelling, which was evidently fatty in its nature, continued to increase, and caused much inconvenience by the convulsive movements in the right leg produced by any pressure upon it. I consented to operate, though with some misgiving, when the child was ten months old. It was found, during the operation, that the fatty tumour at its base extended into the interior of the sacral canal, through an opening (*due to the deficiency of the laminæ*), and was adherent to the membranes of the spinal cord; from these I dissected it off, fortunately without their being wounded, and the patient did well; the wound healed, and the convulsive movements ceased. Some time after its removal from the hospital, the child died from an accidental attack of inflammation of the bowels, when I had an opportunity of removing and examining the lower part of the spine, which is now before you. It will be seen that, in addition to the external tumor which was removed, there is a considerable fatty mass, with which the other was probably connected, extending for some distance *inside* the dura mater; this pressed upon the spinal cord, and involved the roots of the lowest spinal nerves so completely, that they seem to be imbedded in its substance. There is, moreover, a malformation of the lower sacral vertebræ, which are partly displaced and partly deficient.

The case, full details of which are published in the eighth volume of the *Pathological Transactions*, shows the care which should be exercised in operating, even on solid tumours in the spinal region, when they occur in very young children.

Deficiency or Excess of Parts. With respect to the former, though we cannot, indeed, supply the deficiency, we can generally, by surgical or mechanical means, alleviate the inconvenience. In the latter, it is often in our power to render more efficient aid, by reducing the parts to their normal proportions. On the table, for instance, is the cast of a foot with nine toes, belonging to a female child, a superabundance of which the parents and even the child herself, were desirous of getting rid. The supernumerary toes were removed, and the foot was made to match its fellow of the opposite side.

Hermaphrodism. There is another irregularity of formation occasionally brought to our notice, when, as is sometimes the case, we are called upon to determine the sex of the child. I mean *hermaphrodism*. Three varieties of this have been described—viz., apparent hermaphrodism of the male, apparent hermaphrodism of the female, and the neutral or true hermaphrodism.

The first, or pseudo-hermaphrodism of the male may depend—firstly, on *inversio vesicæ*, the red surface of the bladder having been mistaken for the vulva. As, however, this is seated principally *above* the pubic bones, the diagnosis ought to be easy.

Secondly, it may depend on adhesion of the under surface of the penis to the scrotum, in which it is buried, so as to present the appearance of an imperforate vagina. Mr. Terry relates a case of this kind, where a child, christened and considered as a female, turned out to be a boy; the penis being easily liberated, and found to be perfect, with the exception of a slight amount of hypospadias. Wrisberg mentions two similar cases, discovered at the ages of 19 and 46.

The third, and most usual form, however, consists in a fissured condition of the scrotum, which may then present a perineal cleft bounded by two folds of integument, bearing much resemblance to the labia, especially in those cases where the testicles have not descended. The resemblance to the vulva is generally increased by the small size of the penis, which is not unfrequently imperforate, or divided on its under surface, constituting the condition termed *hypospadias*. Numerous examples of errors in assigning the sex, committed from the last cause, have been noted. Amongst the most remarkable of these, is a case related in the *Cyclopædia of Anatomy and Physiology*, quoted from Otto, where the individual "had lived ten years in the state of wedlock, with three different men; but at the age of thirty-five an action of divorce was brought against her by her third husband, who accused her of being affected with some disease of the sexual parts, that rendered the connubial act on his part extremely difficult and painful". After some consideration, it was at last decided by the Royal Medical College of Silesia, that the supposed wife was a male, and that the condition of parts was that which I have just described.

A child, 15 months old, brought to this Hospital very recently, and whom many of you may have inspected, belonged, I believe to this class of hermaphrodism, though he has been christened Elizabeth, and some unusual peculiarities were present. The extremity of the glans, which, with the member itself, is of considerable size, presents in its centre a fine opening, just large enough to admit of the introduction of an Anel's probe; this opening or urethra undoubtedly leads to the bladder, for the urine is passed through it with considerable force, though in a very fine jet, and apparently with pain. The urine, however, also comes away in a much larger stream through an opening placed beneath the member, resembling a vagina, by which a catheter can easily be passed into the bladder. No direct communication exists between the two urinary passages, which are at some distance from each other. A deep groove, lined with an ash-coloured membrane, exists for some distance on the under surface of the member, passing backwards into the vagina-like opening, and ending in front in a cul-de-sac quite distinct from and below the glandular urethra. The vagina-like passage, the orifice of which was closed at birth, and was subsequently opened by a surgeon, in consequence of the straining in passing the urine, is just large enough to admit the end of a small little-finger to the extent of about an inch. No uterus can be felt, and a catheter introduced along the passage at once enters the bladder. There is a considerable interval of skin and soft parts between this opening and the anus, constituting a fair sized perineum. On each side of the opening is a kind of labium, at present in a

state of inflammation. On the right side can be felt, in its interior, a swelling bearing some resemblance to a testis, though much enlarged, and there is also a kind of cord prolonged from it into the abdomen. The left side is empty.

The congenital pseudo-hermaphrodism of the female consists mainly in an extraordinary enlargement or hypertrophy of the clitoris. In intrauterine life, it will be recollected, the clitoris is at first almost as large as the penis; and even at birth it is, proportionately, of considerable size. Its increase, however, afterwards is relatively slight, and at puberty it is usually not more than seven or eight lines in length. Occasionally, however, it happens that the development of the clitoris progresses as it did in the first few months of fœtal life; and the infant, nay, even the grown woman, presents an organ closely resembling that of the male. A photographic view, though not a very good one, of a case of this kind brought to me to determine the sex in a child eleven years of age, is now on the table.

Enlargement of the clitoris, which sometimes becomes three inches or more in length, is not always congenital, but may take place subsequently—too often, probably, as a result of early masturbation. If considered desirable, it may be cut or pared down; but, in this case, you must be prepared for copious hæmorrhage.

Simple enlargement of this organ seldom causes much difficulty in our diagnosis even in infants. Frequently, however, it is combined with other malformations, and then the determination of the sex becomes less easy. The vagina, for instance, may be much contracted, and its orifice closed by a membranous septum; nay, even the ovaries, with the Fallopian tubes, are said to have descended through the inguinal canal, presenting the appearance and sensation of the testicles. There may be, too, an indentation at the point of the glans, resembling the urethra, or even a blind canal extending for a certain distance, or a groove on its under surface, as in hypospadias. It is stated, however, by M. Marc, that the clitoris is *never* perforated by an urethra.

It will be seen, therefore, that it is not always an easy matter to decide upon the sex in the child. Even at a later age, when the parts are more developed, and when we may be assisted by the supervention of the menstrual discharge, mistakes and confusion have often occurred, and experienced observers have differed in the conclusions at which they have arrived.

There is another variety of pseudo-hermaphrodism of the female I may mention, though it is met with, of course, at a more advanced age, which depends on prolapsus of the uterus and vagina, which last becomes cuticular, and may present a certain resemblance to a penis.

For the neutral or true hermaphrodism—the *hermaphrodisia per excessum* of Rokitansky—I must refer you to the elaborate article on the subject in the *Cyclopædia of Anatomy and Physiology*; for the limited time at my disposal will not admit of my saying more at present on the subject of congenital deformities, with which, indeed, I fear I have already exhausted your patience; and yet there are numerous classes of them to which I have not even alluded—nævi and erectile tumours, for instance, which would of themselves offer abundant materials for at least a lecture. I think, however, we may fairly admit that the subject of malformations presents a wide field for surgical investigation and assistance.

II.—Injuries and Accidents.

The second division of surgical affections consists of accidents or injuries. Children are, of course, exposed to almost every accident which can befall an adult. There are some forms, however, to which they are either unusually liable, or the consequences of which present certain distinctive points for observation and treatment. Amongst the first, I may briefly draw your attention to the great fondness on the part of children for introducing foreign bodies into the different mucous passages. When these are taken into the mouth and swallowed, it is to the art of the physician that recourse is usually had; but, should they unfortunately pass into the windpipe, surgical aid often becomes necessary, and the operation of tracheotomy may be called for.

Foreign Bodies in the Nose and Ears. The main regions, however, which young England selects as repositories for its miscellaneous articles, are the nose and the ear. In the former, you will constantly find beans, peas, shells, cherry-stones, and wood-shavings; but the favourite article, according to my experience, is buttons. Any of these substances may remain lodged for a considerable time, and undergo, of course, a certain amount of change in themselves, in addition to the inflammation or ulceration of the passages, to which they may at last give rise. Buttons, for instance, may become corroded; peas may swell out, from the heat and moisture to which they are exposed; and, in the fifteenth volume of the *Journal de Medecine*, you will find an account of a haricot bean which is said to have germinated in the nose, and pushed out some ten or a dozen roots. Without absolutely denying this fact, we may perhaps be permitted not to believe it.

The practical points, however, for the surgeon are, the necessity, in cases of obstinate discharge from one nostril in children, of making a careful examination of the parts; for it often happens that the child, it may be from forgetfulness, or more probably from fear of punishment by the parents or dread of pain in the extraction, omits to mention anything about a foreign body having been introduced, and the case is brought to us as one of idiopathic discharge. In the removal, too, it is desirable to ascertain exactly the position, and, if possible, to get a clear view of the object; not to be hurriedly pushing at it in the dark, as is sometimes done, but clearing away any blood and mucus by syringing with plenty of water; then get the end of your probe, or of your narrow forceps, well behind the body, and so pull it forwards. It may be as well, perhaps, during the removal, to keep your patient's mouth shut, or else there may be an accident similar to one mentioned to me by Dr. West. In this case, a small shell was extracted from the nose; but unfortunately, at the moment of extraction, it slipped, and dropped into the mouth, which was wide open, when it was immediately swallowed. It is hardly necessary, on the other hand, for me to caution you against mistaking the pulpy thickening of the mucous membrane over the turbinated bones, which so often occurs in scrofulous children, for an extraneous substance, or to deprecate their forcible removal.

When foreign bodies are introduced into the external ear, they are usually at once removed, or, if allowed to remain, their presence is demonstrated by the inflammation which is set up. Occasionally, however, it happens, especially if the body is hard and smooth, that it may remain without much disturbance, and without its existence being known except to the child, by whom, too, it is probably soon forgotten. In this way, deafness of one ear may be produced, affecting only the side in which the extraneous substance is lodged. Very recently, a boy was brought to St. George's Hospital, who had been deaf of one ear for quite a twelvemonth, no cause being either assigned or known. Mr. Prescott Hewett found, on examining the ear, something which he took at first for an accumulation of wax, but which turned out to be a piece of nut-shell, which had been lying there all that time. The cause being removed, the deafness, I believe, soon vanished.

Fractures of the Bones, with which we may class separation of the epiphyses, constitute another form of injury which presents some important distinctive characters when occurring in children. As a general rule, fractures, properly so called, are not so frequent in children as in older people; principally, no doubt, in consequence of the proportionate excess of the *animal* over the *earthy* constituents, but partly also because children are not in general exposed to the same extent to external violence. Notwithstanding these advantages, fractures are by no means uncommon in early life; this is due, to a considerable degree, to the rickety condition of the bones so apt to occur then, and to the consequent alteration in their shape. M. Guersant, for instance, states (*Clinique des Hôpitaux des Enfants*, 6ième année, p. 28), that out of a mean of eighty cases a year of fractures in early life, he has found about one-third occur in rickety children. At this Hospital we do not profess to treat accidents, and consequently have comparatively few fractures carried here; but still cases like the following are occasionally brought under our notice.

A boy, of the name of Lawrence, four years of age, came to me as an out-patient, with general rickets and fracture of the upper part of one humerus, produced by some slight accident; before this had united, an equally slight accident caused fracture of the opposite arm, the separation in this case not being complete, the periosteum still connecting the broken extremities. To prevent him from undergoing a complete course of fractures, I thought it better to receive him into the Hospital, where the bones united perfectly but slowly. In another boy, too, of the name of Wentworth, eight years of age, in whom the rickety condition of the bones had advanced so far that he had been unable to walk or even to stand for a very lengthened period before he came under my care, there had been fracture of both thighs one after the other. Professor Gibson, of Philadelphia, relates a case under his own observation, where a rickety boy experienced twenty-four fractures, all from slight

causes, and all uniting without much difficulty. In the collection, too, of M. Esquirol, according to Cloquet (*Dict. de Médecine*, quoted in article "Fracture", *Cyclopædia of Practical Surgery*), is the skeleton of a rachitic female presenting the traces of above two hundred fractures, which appear to have been effected at different periods, judging from the nature of the varying amounts of consolidation.

Examples of these multiplied fractures occurring in rickety children, then, may often be met with, though they seldom show themselves before the appearance of curvature. The following interesting case is quoted from Malgaigne's work on *Fractures*. A boy, whose father was healthy, but the mother rickety, and who had himself been affected with rickets from early infancy, had a fall whilst playing, when six years of age, and the left humerus was fractured; the injury was unaccompanied with pain, and the bone united firmly in the course of a month. A year afterwards, whilst at play, he broke his *left* femur about the middle; consolidation took place in forty days. At the end of another three months, whilst leaning out of bed to pick up something, his *left* thigh bone broke again, but in a different place; forty days sufficed for the union, but he had to take to crutches, owing to his general weakness. Arrived at the age of ten, one of his crutches slipped, he fell, and fractured his *right* thigh-bone; he was taken to the Hôpital des Enfants, where M. Malgaigne saw him, and recognised the traces of the previous fractures; this one, which was transverse, like the others gave rise to scarcely any pain; and in forty days union had taken place.

This disposition to fracture in rickets—and rickets, according to M. Malgaigne, is perhaps the affection which predisposes the most to fractures—is due partly to the altered structure of the bone; but, besides this, the great weakness of the limbs, as well as of the whole body, in these cases, renders walking more difficult, falls more frequent; and, finally, the altered shape of the bone, which usually becomes curved, conduces to fracture, just as a bent stick is more easily broken than a straight one.

Fractures in young children, even in those not affected with rickets, usually present little deformity, owing to the periosteum not being completely separated; after the age of thirteen or fourteen, however, the periosteum tears more easily, and separation of the fragments becomes more common. Hence the breaking of a bone in early life has been compared to that of a stick which preserves, at the point of rupture, some of its fibres uninjured. To obtain much benefit from this preservation of the periosteum, the broken parts ought to be kept at rest *at once*, or else complete separation may occur, and the deformity may be much increased. It is as well to be aware of this peculiarity, to avoid the odium of overlooking a fracture in a child in its early stage. I was sent for, for example, a short distance into the country to see a young gentleman who had been thrown from his pony. He had been examined on the spot by a physician of eminence, who could detect no fracture; and in fact the child could and did use his arm at first, so far as to remount his pony. By the time I arrived, the periosteum had become completely lacerated, and the fracture of the clavicle was well marked, one end riding over the other.

Where rickets is present, this absence of deformity, owing to the strength of the periosteal sheath, is even more marked; and even if deformity exist, it is apt to be confounded with the curvatures so common in this affection; there is little or no crepitation owing to the softness of the bones; and, in fact, the main symptoms present, are an unusual amount of flexibility and mobility at the part which is injured. If the fracture is not recognised, if no proper treatment be adopted, if the limb is allowed to be freely used, the symptoms in these cases also become more marked; the periosteum may be ruptured, riding of the fragments may occur, and even crepitation be noticed if the softening of the bone be not too far advanced.

As a general rule, in fractures occurring in children, the period required for surgical treatment is much less than in adults; occupying, perhaps, not more than one half the time; when, however, the case is complicated with rickets, the necessity for artificial support continues for a much longer period; but still, consolidation does occur, its rapidity being in an inverse ratio to the intensity of the rickets. With respect to the treatment, I have no particular remarks to offer, except to caution you to be very careful in padding the limb well, especially over any prominence of bone, before applying your splint or starched bandage; these, too, *need not*, and *should not*, be put on with unnecessary tightness, if you wish to avoid excoriations, sloughs, or gangrene, to which the delicate skin of the child is very liable. This caution is especially needed in rickets, where the ends of the bones are preternaturally prominent, and the soft parts over them unusually disposed to mortify. In fractures of the lower extremities, also, we should be in mind the habits of young people with respect to passing the urine, etc., and use every care to protect the apparatus, as far as possible, by the use of oiled silk or other appropriate contrivances.

Incomplete Fracture. Occasionally it happens in children that the bone, instead of breaking, becomes bent or incompletely fractured, as may be seen in this clavicle, taken from a boy five years of age, who died from inflammation of the brain. The tendency to this form of injury may be said to date from birth, attaining its maximum about the second year, and almost ceasing at the age of twelve. The most important of the symptoms here is the deformity of the part, which may sometimes be very considerable; at the same time, there is complete absence of either mobility or crepitus, so that the fracture may be overlooked, the distortion attributed to the swelling of the soft parts. From the ordinary bending of the bones which occurs in rickets, it may be distinguished by the absence of the general marks of that affection, and by its occurring immediately after an accident. In the preparation before you it will be seen that the incomplete fracture has occurred at the centre of the right clavicle, the bony laminæ at the under surface being broken through, whilst the upper surface is only partially fractured, and bent outwards.

The treatment of this injury, which principally affects the bones of the fore-arm or the leg, is generally simple; the bone being soft and yielding can almost always, by the employment of moderate force, be bent back to its original shape, and then secured on a splint according to the extent of the fracture. Even where the injury is of some standing, the deformity can in this way generally be relieved.

Separation of Epiphyses. The last form of injury of the bones to which I wish briefly to direct your attention, is traumatic separation of the epiphyses. Hippocrates is said to have made mention of this accident, Ambrose Paré treats of it, Reichel, exactly one hundred years ago, wrote a special treatise on the subject, and since then it has been described by numerous authors; but cases in which the exact nature of the injury has been shown after death are not, I believe, very common; in fact Delpech, in 1816, thought he could deny their real existence. That they do really occur, however, has been proved by actual dissection in, at least, the following situations:—both ends of the humerus, the lower end of the radius, both ends of the femur, and both extremities of the tibia as well as of the fibula.

In the seventh volume of the *Archives de Médecine* will be found a case of intrauterine injury, in which the child presented at birth an open wound of the leg, through which projected the shaft or body of the tibia, which was completely torn away from the lower epiphysis. The infant died on the thirteenth day. In the *Clinique des Hôpitaux des Enfants* will be found some papers, by M. Alphonse Salmon, detailing a series of experiments at the Paris Foundling Hospital, where he fractured 125 arms, at or near the elbow-joint, in children varying from the age of one day to three years; the children, I need scarcely say, were not alive at the time. In these cases he found that up to the age of five months, separation of one or more of the epiphyses was very easily produced, occurring, indeed, much more frequently than either fracture or bending, in the proportion of 73 to 12, but above this age, the excess diminished rapidly.

In early infancy, then, at least, this accident is one that can be produced by external violence; and the same thing occurs at a later period, when, from the progress of age, the epiphyses have acquired a great amount of development, and up to the time when they become consolidated with the shaft.

Several cases of this injury are related in Malgaigne's work on *Fractures*, occurring in boys between the ages of eleven and fifteen; and in the Museum of St. George's Hospital will be found a preparation showing separation of the lower epiphysis of the femur in a lad 16 years of age, and another in which there was separation of the lower epiphyses both of the *femur* and *tibia*, as well as of the epiphysis at *each end* of the *fibula*, in a young man of 18. The accident in the latter case, necessitating immediate amputation of the thigh, was caused by the leg getting entangled in a rope which became twisted round it whilst the lad was in the act of jumping from a pier to the deck of a steamboat. Here, too, is a preparation with laceration of the inferior epiphysis of the radius, but the exact age of the patient in this case is not known.

It has been remarked that this accident is one that occurs specially in male subjects, and M. Malgaigne says that he knows of no instance occurring in a female in which, at least, the real nature of the accident has been satisfactorily proved.

It is no easy matter to distinguish this accident from fracture near the joint, with which it has, no doubt, been often confounded. Besides the age of the patient, the most characteristic sign would be the soft, dull kind of crepitus obtained as distinguished from the more harsh and rough crepitation met with when the bone itself is broken through, though even this is by no means conclusive. The treatment, fortunately, will be the same in both cases, so that no great harm will happen to the patient, even if a mistake should occur in the diagnosis; union taking place in this injury as readily as in fracture.

Vacation Lectures

ON

FIBRINOUS DEPOSITION IN THE HEART:

ITS HISTORY AND PRACTICAL MEANING.

DELIVERED AT THE GROSVENOR PLACE SCHOOL OF MEDICINE.

By BENJAMIN W. RICHARDSON, M.A., M.D., M.R.C.P.,
Lecturer on Physiology at the School, and Senior Physician to the Royal Infirmary for Diseases of the Chest.

Lecture I.

Introductory Remarks; *Plan of the Course; Different conditions of Blood in the Heart after death.* Fibrinous Concretions in the Heart: *their Forms; Structure; Weight; Chemistry; Process of Deposit; Post Mortem and Ante Mortem Deposits.*

[*Continued from page 24.*]

II.—Physical and Chemical Characters of Deposits.

From the consideration of the general forms of fibrinous deposits in the heart, it is instructive to turn to the deposits themselves, to remove them, and to examine their minute structure with as much care as can be bestowed upon the inquiry. In such an investigation, we may notice points relating to colour; consistency; structural outline; microscopical appearances; weight; and chemistry.

Colour. The colour of a fibrinous deposit varies from a dull red, approaching closely in tint the red of a voluntary muscle soon after death, to a perfect and pure white. This difference depends entirely upon the relation existing between the amount of hæmatine or colouring matter of the red blood-corpuscle and of separated fibrine. In cases where the separation is very rapid, some amount of coloured corpuscles, varying according to the period of separation, may be entrapped in the fibrine, when the concretion will be more or less red in colour. In other cases, where the fibrine separates very slowly, particle by particle, if I may so say, the concretion will be entirely free of coloured matter, except perhaps on its external surface, where it may have been left in contact with a little remaining red blood; and, divided in any direction, will convey the idea of a pearly looking mass throughout.

Consistence. The consistence of a fibrinous concretion is not invariably the same. In some examples—in cases, for instance, where, as we shall afterwards see, the concretion is the last fact in the course of a fatal disease, the determining fact of the death—the substance of the mass is soft and almost gelatinous in its character; while modeled to the part, and completely filling a cavity or tube, this clot may be so soft as scarcely to be removable without breakage. If it is cut across, it seems as if it were infiltrated with dirty thin fluid; and, placed on the water-bath so as to dry up, it is left as a mere film or thread on the drying plate. This condition of clot is only to be expected in cases where there has been some pre-existent asthenic long continued disease.

There is an opposite state, in which the fibrinous clot is laid down rapidly and in the course of diseases very acute and sthenic, in inflammatory diseases, such as croup and pneumonia. In these, the concretion may be, indeed generally is, so firm that it cannot be removed from any attachment it may have without some tearing either of the fibre of the concretion itself, or of the fibre of the heart. Concretion of this kind is not unlike, in colour and firmness, the coagulated albumen of the egg after hard boiling. From this it differs, nevertheless, in that, when broken across, it is not fractured in a clean clear surface, but in a jagged fibrous form. If a fibre of such a clot be pulled, it will be found to possess a considerable degree of elasticity, and to curl up like the tendril of a vine, something in the way that the elastic or yellow tissue curls when cut across, extended, and then set free. Nothing can be more distinct, in short, than the difference in character between this form of clot and that already named as gelatinous. Both are produced by separation of the same constituent of the blood; it will be surmised, therefore, that this constituent, in the course of disease, undergoes great modification in its nature. The fact is so; and, inasmuch as death may occur at different periods in various diseases, so there may be observed, as the result of an inquiry extending over many cases, shades of consistency in all degrees, from the gelatinous and watery to the firm and fibrous.

Again, a fibrinous concretion may be found in two states. It may be firm and tough on its exterior, and soft, pulpy, or even creamy, in its centre. It was at one time assumed that, in clots having these appearances, the matter present in the centre of the concretion was pus. Mr. Gulliver was the first to point out the error of the said conclusion. He determined the fact that the fluid matter so situated is identical with softened fibrine; and that, when fibrine removed from the body is subjected to a temperature of 96°, it begins to soften in forty hours, and looks to the naked eye like purulent matter, but may be distinguished from that matter by the microscopical characters. He adds—I believe I am using his own words—"the softening of coagulated fibrine is an elementary pathological condition, frequent, distinct from suppuration, and constituting many of those cases called suppurative phlebitis." I am fully of opinion that Mr. Gulliver, in these remarks, has indicated with great precision an important but simple pathological fact. Concretions containing pulpy matter, like those gelatinous in structure, are found only in cases of the asthenic type—in cases where the fibrine may be said to be diseased or imperfectly developed.

Structural Outline. In a great number of concretions, there is found a peculiarly well marked *laminated* condition of the deposited mass; *i. e.*, when divided, the mass bears the character of having been composed in exact order, in layers laid down one upon the other, either from the centre towards the circumference, or from the circumference towards the centre. When a striated concretion is formed in an auricle or ventricle, and assumes a globular form, the layers are encircling; they are disposed, to use a common simile, like the coats of an onion, but of course, being extremely thin, are not so obvious to the sight. Still the striated character is so well traced in many examples, that the arrangement is to be discerned even by the eye alone. When the striated deposit occurs in the pulmonary artery or aorta, being then laid down as a cylinder, the layers are also circular, running the whole length of the cylinder. The *tubular* concretion is in this way formed of a series of layers, the innermost of which encloses the contained red coagulum.

Whenever in fibrinous deposit, layer upon layer, in the manner described, the red colouring principle of the blood pervades the mass, the appearance presented bears the closest analogy to a portion of voluntary muscular fibre. This analogy is so perfect that, in one case, I knew a gentleman who, on meeting with one of these formations in the pulmonary artery, mistook it at first sight for a portion of muscle. A mistake of this kind is necessarily soon dispelled on close examination; but I point out the analogy as a means of conveying the plainest description of a coloured striated deposit.

Microscopical Characters. The microscopical characters of a fibrinous deposit present but few peculiarities. In clots perfectly free from colour and firm in structure, the microscopical form is that of a closely woven fibrillar network, uniform, or nearly so, in appearance throughout. Interspersed amongst the fibrillæ, one occasionally sees, at considerable distances apart, colourless cells resembling the white blood-cells, and indeed not to be distinguished from them. When the clot is coloured, there are to be seen, in the meshes of the fibrine, red corpuscles also, their amount varying with the depth of the red coloration. The softened matter found in the centre of some concretions presents the appearance of white cells, mixed up with disintegrated fibrils and a considerable quantity of granular substance of a brick-dust shade. In concretions lying in a cavity, and having a *mechanical* attachment, these are the only microscopical characters with which I am conversant.

In the case of a concretion becoming organised, a more complex microscopical field is presented. I have had one opportunity of examining such a clot; and the appearances in that instance were those of an areolar web rich in white cells, and having vessels ramifying in great abundance through every part.

I say that I have seen but one illustration of an organised concretion. This is true; but I had, on a second occasion, brought before me a firm growth, adherent to the wall of the left ventricle of the heart by a broad base, and presenting, as regards position and outline, the idea of a fibrinous concretion having an organised attachment to the muscular wall. But, on examination, I failed to detect any sign of blood-vessel; I found only a very loose network enclosing lymph-like cells; and, as the history of the case gave me no clue bearing towards the view of a deposit of fibrine from the blood at any period, I am left doubtful on the point whether or not this was a form of fibrinous organisation. I should rather be inclined to think that it was not, but was a new growth developed from the endocardial surface.

Weight. The weight of a fibrinous concretion is an important matter; for the weight, ascertained both before and after drying, gives us data by which to form an estimate in discussing the question of the *ante mortem* and *post mortem* origin of concretion. I have paid considerable attention to this question of weight; and the mean result of the labour leads to the fact that there is the greatest possible difference in the actual amount of fibrine in different concretions—a difference which does not in any way depend on the relative size of concretions, but on their consistence, or, in other words, on the amount of water present in the mass.

I once removed a large soft gelatinous concretion, made up almost entirely of water, from the right ventricle and pulmonary artery of a man who died from chronic alcoholic poisoning, and found it, when washed of red blood and externally dried with blotting-paper, to weigh 215 grains. Removing fifteen grains with the scissors, I let the remaining mass of two hundred grains dry at a gentle heat until it ceased to lose weight. The result was a residue barely turning the balance against six grains. The concretion, therefore, in this example, contained, as it existed in the heart, so little as 3 per cent. of fibrine.

In other forms of concretion, the amount of fibrine present is very large. I removed from the right ventricle of a girl, 14 years of age, who died of acute rheumatic fever, a dense concretion, which, washed first with water and then with ether, to take up fatty matter, weighed in the moist state exactly 144 grains. This concretion, dried gently until it ceased to lose weight, yielded not less than 12·5 per cent. of fibrine. In another specimen of concretion, taken from the left ventricle and aorta of a man, a concretion which in the moist state weighed, at the time it was removed from the heart, 170 grains, I found, after perfect drying, a percentage of 11·18 of fibrine. In a third example, a concretion weighing 43 grains, obtained from the auricle of a child that had died from an acute pneumonia, yielded so much as 30·3 per cent. of fibrine. And in a fourth example, where a concretion weighing 27 grains in the moist state was found in the right auricle of an infant, a proportion of 30·2 per cent. of fibrine was yielded. In this last case, the fibrine had been enclosed in the auricle for many days before death, and was unusually firm.

These differences in the amount of water present in a concretion depend on the quality of the fibrine, and on the time elapsing from the commencement of the process of deposit and the termination. As the soft or gelatinous concretion is common to that class of cases where long continued exhaustion marks the end, so, on the contrary, that which retains so much more of solid matter is the product of a disease of the acute inflammatory type, in which the fibrine is in excess in relation to its solvent, and possesses active contractile force. The difference in weight is therefore not remarkable; for, in the last named concretion, the water is made to exude in some measure by the contraction of the mass during its deposition.

Chemistry of Concretions. In so far as I can ascertain, the concretions met with in all cases are pure specimens of ordinary fibrine. According to Mulder and Franz Simon, fibrine of inflammatory blood may be considered in a higher state of oxidation than normal fibrine; and the terms binoxide and tritoxide of protein have been used to express this higher oxidation. The hypothesis of a separate body in the form of protein is now given up; and, in so far as the action of reagents on inflammatory fibrine proves a fact, it proves that this fibrine is the same as common fibrine obtained from healthy blood. Concretions of all kinds, as far as my experiments indicate, are composed of matter soluble in all alkaline solutions, and in acetic, citric, and butyric acids; of matter that may be precipitated from acid solutions by ferrocyanide of potassium; and of matter insoluble in pure water, ether, and alcohol. Butyric acid dissolves the concretion most energetically. The same rules obtain in regard to fibrine in its ordinary condition. I would, however, make one observation in relation to the amount of fat present in certain of these deposits. In concretions formed during acute inflammatory disorders, there is often to be seen on the external surface a distinct coating of an oily nature, which can be removed effectually by ether, and which sometimes is not confined to the surface of the clot, but extends through it. It is true there is always a small amount —about 2 per cent.—of fatty matter in fibrine; but in these examples the normal amount is very considerably exceeded. It may be doubled, or even trebled. The excess seems to me to be due to the same general producing cause as that which determines the increase of fibrine; viz., quickened respiration and circulation, and more active combustion—hypercausis. In cases where concretion occurs during exhausting diseases, there is no such increase of fatty substance.

III.—Order of Construction of a Concretion.

Those concretions which merely coat a mass of red coagulated blood, are produced exactly in the same manner as is the buffy coat on inflammatory blood newly drawn from the body. There is a simple separation taking place slowly, but *en masse*. Hence this form of concretion is not disposed in layers—it is one layer in itself. But in concretions such as were described in figures 2 to 6, the method of construction is essentially different. In these, the first step in development consists in the laying down of a portion of fibrine, in such a manner as to form a fixed point or basis for future deposition. Two special points in the cardiac cavities are favourable to such primary formation. The auricula of the auricle is one such point; the portion of the ventricle immediately below the infundibulum on either side is another; nevertheless, there may be separation commencing at any part of the cavity where, from irregularity of surface, and the presence of muscular bands or tendinous ends, the fibrine can interlace and hold fast. In forms of chronic cardiac or aortic disease, a groundwork for a concretion is offered in a surface of roughened valve or atheromatous artery. Any way, in whatever part it may be situated, or however slight its extent, there is a surface of attachment from which the further development of the deposit takes place; and, unless this fact is recollected, it is impossible to understand the peculiar courses which a concretion may assume. The first particles of fibrine thus laid down at a fixed spot, the progress of its increase is modified according to the time allowed for separation, and the condition of the blood. When the deposition commences in the earlier stages of a sthenic disease, the deposit laid down, particle by particle, during each passage of the laving blood, is arranged under the direction of the blood-currents into one or other of those forms which have been already explained. Taking the auricula of the right auricle as its basis, a concretion will go on gradually forming, and will encroach largely on the cavity without interfering with the course of the two venous currents. In this way is formed that variety of concretion which, as we have seen, sometimes fills the auricle exclusively, and even distends it. In the acute inflammatory diseases of children, this concretion is frequently formed.

If, again, the concretion take the posterior surface of the auricle as its basis, it will by its steady advancement anteriorly come at last into contact with the venous currents, and will be grooved by them—will be grooved above in a long curved line, *i. e.* in a line directed from the superior cava into the ventricle, and below in a line indicating a sharp curve from the inferior cava into the ventricle.

Or, if the concretion take its origin from two points of attachment in the auricle—from the anterior inner surface as well as the posterior—we then after death discover the double concretion, with the two columns of blood issuing between the two deposits, and grooving both.

Once more, the concretion, taking the auricle for its base, may extend into the ventricle, and, following the course of the circulatory channel, may make a rapid sweep into the infundibulum and pulmonary artery on the right side, or the aorta on the left side. Thus continuing, its ramifications may extend into the smaller branches of the pulmonary artery, or far along the aortic curvature.

Concretions arising in either ventricle take their insertion

from the ventricular wall, and, almost invariably following the course of the blood-currents, pass into the great arterial trunks leading from the ventricle. The concretion thus running along the main trunk is either tubular in character, or is entirely surrounded by blood, or grooved spirally.

There is yet another condition, in which the deposition, being more slowly carried on and more extended in its character, occurs in the form of a layer, having no one point, but a wide spread surface. In this form of deposition are produced the hollow concretions—those which line a cavity or a vessel, and enclose in their centres red blood.

Lastly, there is that concretion which undergoes *organic* development. In all instances of this nature, there is, in my opinion, a preceding change in the endocardial lining. There are injection of the subserous layer, œdema, exudation of plastic matter, with rupture of surface, and production of a point on which the fibrine of the free blood finds not only a basis, but a basis directly connected with the endocardial membrane. In process of time, vessels from the broken membrane are thrown out, and, extending through the fibrinous matter deposited by the blood, furnish it, if the patient live long enough, with the materials for a new and special organic growth, possessing a permanent and independent existence.

[*To be continued.*]

Original Communications.

PALLIATIVE TREATMENT OF CANCER.

By Thomas Hunt, Esq., F.R.C.S.

My remarks apply only to those cases of true scirrhus in the breast in which there is a hard and moveable tumour, not yet advanced to the stage of ulceration.

One indication in this condition of things is as far as possible to *prevent* the occurrence of ulceration. I regard this process as chiefly the result of the *pressure* sustained by the skin and cellular membrane, from *one* hard substance within (the stony tumour), and *another* hard substance without (the patient's corset). This pressure is generally sufficiently severe not only to give rise to pain, but to effect, first, a congestion of the healthy vessels, and secondly, an absorption of the healthy structure, without being sufficient to absorb (as has been proposed by higher pressure) the cancerous tumour itself. A second indication is, to support the tumour, without undue pressure; and a third, to relieve pain.

All these purposes are easily accomplished, in most cases, by the following expedients:—The whole breast should be allowed to rest on a thick broad compress of cotton wadding. When the breast is very pendulous, an old silk handkerchief may be passed, as a sling, between the mamma and the wadding, and tied over the opposite shoulder, one tail of the handkerchief being passed over the clavicle, the other tail over the scapula and spine; and all should be included in a capacious corset, which will then become a comfortable support, instead of acting as a tormenting *vice*. Where the pain has been very severe, I have applied to the skin a belladonna plaster, spread thinly on soft thin leather. This, by encompassing not only the whole breast, but an inch or two of skin beyond it in all directions, will materially assist in giving comfortable support, and also in allaying the irritability of the nerves. By this *local* treatment I have often succeeded in relieving the patient of all pain for months together, and also in preserving the isolation of the tumour, and in many cases diminishing its size.

Together with this local treatment, great attention should also be paid to the bodily health and mental tranquillity of the patient. She should be encouraged to hope that her pains may be much relieved, if not entirely removed; that the disease may probably be checked, or even so far subdued as to become for a very considerable period comparatively harmless and benign. The health should be sustained by a generous but regulated diet; by engaging the patient as much as possible in cheerful society; and last, not least, by moderate but frequent exercise in the open air, in a locality where the atmosphere is pure and mild. This will be far, very far, better than confinement in the house, and infinitely better than confinement in the wards of a hospital containing patients with open wounds. If the health is feeble, much good will be derived from the following formula:—

℞ Tinct. ferri sesquichloridi ʒiij; liquor arsenici chloridi ʒv; aquæ destillatæ ʒviij. M. Capiat minima xl ter in die ex aqua post cibum.

The dose of both the iron and the arsenic must be regulated by their respective effects. The iron is *generally* useful and necessary, the arsenic *always;* for, although I have rarely found a cancerous tumour entirely dissipated by arsenic, I have as rarely known the mineral fail to check its onward course. It most assuredly exerts, when discreetly administered, a certain amount of specific influence over the disease. I wish I could say more than this in favour of arsenical treatment; but truth requires that I should stop here. That there is no medicine which is so uniform and potent in its controlling power over this disease, is, however, most evident; and in this opinion I am supported by many high authorities in surgery.

As illustrative of the good effects of the proposed treatment, I have selected, out of many, the two following cases.

Case i. A female servant, aged 40, single, consulted me in the autumn of 1858, on account of a tumour in the left mamma, which had been observed to exist upwards of a year, and which was becoming painful, and was beginning seriously to affect her health.

Sept. 16th, 1858. The tumour was about the size of a nutmeg, irregular, moveable, and of petrous hardness, having little sensibility, and little apparent connexion with the surrounding parts. It occupied a space a little below the nipple, which was not contracted, nor was the skin puckered or discoloured. The absorbent glands were unaffected; but the complexion was sallow and dusky; the appetite nearly gone; the nights were disturbed; and she complained of feeling "very weak and sinking". The alvine and uterine secretions were normal. A soft cushion of cotton wadding was placed under the whole breast, resting on a corset of ample size. She was directed to live well; to take every opportunity of exercise out of doors; and the chloride of arsenic and iron was exhibited thrice a day, in doses of twelve minims and a half of the solution of chloride of arsenic, and seven minims and a half of the tincture of sesquichloride of iron.

Nov. 1st. The pain was much relieved, and she had better nights; the appetite was improving, and the patient felt and looked better. The tumour was diminished in size. The treatment was continued.

Jan. 25th, 1859. She had no pain whatever. The tumour was still wasting. The health was improving. The bowels being inactive, a compound rhubarb pill was directed to be taken every night, and the arsenic and iron persisted in.

July 22nd. She had persevered most regularly in the treatment up to this time, and had had no pain whatever for several months. She looked well and plump, and had a good appetite. She considered herself quite well; but I advised her to persevere for at least another month, and to take especial care to use the cotton wadding as before.

This patient had been advised to have the tumour removed; but she strongly objected to the operation, and had resigned herself to despair. When I last saw her, her spirits were so good that I suppose no one could have convinced her that the tumour was malignant.

Case ii. Miss ——, aged 24, residing on a healthy eminence in the country, had observed for several months a tumour on the right mamma, below and to the right of the nipple. She was a fine handsome girl; and nothing but the extreme hardness of the tumour, coupled with failing health, could have convinced me that she was the subject of cancer.

The tumour was of the size of a bantam's egg, of oval figure, but irregular surface, very hard. The mamma was swollen and tender; the axillary glands were not sensibly enlarged, but very tender, and somewhat painful. The pain in the tumour was often intense and lancinating. The nipple was normal; the skin was slightly puckered over the tumour, which, although buried in a highly developed mamma, was in some degree adherent to the integuments. The health was considerably impaired. The bowels were very much constipated, and the catamenia very irregular, sometimes profuse, and sometimes scanty. There was also severe leucorrhœa, with pelvic pains and general uterine distress; as well as a failing appetite and a coated tongue. The pulse was rapid and feeble. The patient had wasted considerably during the last three months, and her spirits were "wretched".

March 12th, 1858. The breast was enveloped in a belladonna plaster, supported by cotton wadding and a sling. She was directed to regulate the bowels by pills of colocynth, aloes, and rhubarb; and to take the chlorides of iron and arsenic, as

in the former case. She was ordered a full diet, with stout or porter; directed to take exercise in the open air; and encouraged to hope for a speedy amendment. In this she was not disappointed, for in less than a fortnight her health had considerably improved.

May 5th. She was much more free from pain, and better every way in health and spirits. The leucorrhœal discharge was much reduced; the catamenia had become regular and normal. The tumour felt more loose and moveable, and less irregular on its surface; and the puckering of the skin was less obvious. The pain and tenderness in the axilla were quite gone. She complained, however, of headache, and thought the iron did not quite agree with her. The arsenic and aperient pills were continued, without the iron; and the local treatment as before. Fowler's solution, in doses of four minims, was afterwards substituted for the chloride, which began to nauseate a little.

July 19th. She was better every way; appetite good; was gaining flesh, and was in high spirits. The tumour was decidedly reduced in size, and almost free from pain. The treatment was continued.

From this period I saw nothing of the patient for five months; and, as I had never revealed to her the malignant character of the tumour, she expected she was recovering altogether. Accordingly, she visited some friends at a distance, neglected her medicine, and took no heed to the support of the breast.

Dec. 12th. The tumour was larger and more painful; the catamenia were too frequent; leucorrhœa was constant; and there had been a discharge of blood from the bowels, which were constipated. The appetite was fickle and capricious, and the patient looked haggard and dejected. The arsenic, iron, and purgatives, were ordered to be resumed.

I have not seen the patient since the last date; but the relapse of all the bad symptoms, on her neglecting the treatment, is quite as instructive as the benefit previously derived from it.

I am quite aware that it has been suggested by a microscopic pathologist of repute, whose name I forget, that inasmuch as a cancer is a parasitic growth, the application of warm coverings is objectionable, as tending to the more rapid development and growth of the parasite; but a few such facts as the above surely afford a sufficient refutation of this theory. Variations of temperature are great hindrances to healthy action in local disease of every kind; and besides that the cotton wadding serves as a soft cushion, it probably exercises a salutary influence by regulating the temperature of the parts.

Alfred Place, Bedford Square, January 1860.

CASE OF TRAUMATIC EMPYEMA OF SIXTEEN MONTHS STANDING, WITH FISTULÆ: TREATED SUCCESSFULLY.

By Albert G. Walter, Surgeon, Pittsburgh, Pennsylvania, United States.

John O'Neal, aged 32 years, of decidedly strumous diathesis, with fair skin, red hair, by occupation a river-man, had enjoyed excellent health up to the period of his receipt of the following injury. Whilst in discharge of his duties as mate on a Mississippi river steamer, in a dispute with one of the crew, he was stabbed with a broad bladed knife under the left arm, the knife entering the chest between the eighth and ninth ribs, an inch posterior to the median line. Profuse external bleeding from the wounded intercostal artery followed, which was arrested by closing the wound with stitches. Dyspnœa, cough, with bloody sputa and high inflammatory fever, ensued, terminating in empyema. On the ninth day after the injury, an abscess pointed below and anterior to the original wound (which then was closed). This was opened by incision, giving vent to a large quantity of pus. A month later, the wound itself opened spontaneously; from both openings, purulent matter was freely discharged. After six weeks, he had so improved as to be able to go about; but the dyspnœa, chills, and night-sweats, with loss of appetite and strength, too plainly indicated the severe irritation under which his system was suffering. Some months later, considerable improvement had appeared, as the openings, ceasing to discharge, became closed. This state was, however, of short duration. With the recurrence of pleuritic pains, dyspnœa, and hectic, the original wound again opened, giving exit to a still greater quantity of highly offensive greenish matter. Discouraged by the fruitless efforts of his medical adviser, his means exhausted in the vain endeavour to find relief, he returned to his home near this city, and applied for admission into my hospital.

His appearance was that of a person in confirmed phthisis; the shoulders stooped; respiration was short and hurried; the pulse was feeble and rapid; he had frequent chills, during which the countenance assumed a purple hue; and there were irregular paroxysms of fever, with night sweats. The hands and feet were moist or clammy; emaciation was extreme; he had a short teazing cough, with purulent sputa, loss of appetite, disturbed sleep, occasional diarrhœa, with œdema of the ankles. The chest was much sunken in the infraclavicular region on the left side. The opening, surrounded by a papilla of fungous granulation, gave exit to a stream of pus on forced and prolonged inspiration, and admitted a probe downwards and forwards to the extent of four inches and a half, and posteriorly to over six inches. Percussion gave a dull sound over the entire left lung. Auscultation indicated a total absence of respiratory murmur, with the exception of a small space anteriorly, where it could be feebly perceived. In addition to the chest affection, there existed on the left side of the anus, an inch from its orifice, a fistula communicating with an internal opening above the sphincter, which had appeared some months ago.

Under all the circumstances, especially the condition of the pleural sac, whence issued daily fully two pints of offensive purulent discharge, local treatment directed to the obliteration of the cavity, aided by generous aliment, alone promised to afford relief. With this intention, the cavity was daily injected with a weak solution of tincture of iodine in water during some weeks, with but slight and temporary improvement. Concluding that retention of coagulated blood from the wounded artery, or a carious state of the ribs, was the cause of such prolonged and profuse suppuration, I determined on enlarging the opening, and clearing the cavity of the offending *fons mali*. With the patient's consent, on December 8th, 1857, the fistula was enlarged, anæsthesia having been procured by chloroform; but the ribs were found so closely approximated that a free discharge could not be effected. A free crucial incision was made through the skin, fascia, and muscles; the flaps were separated, and an inch of the eighth rib was resected by pliers. This was hardly accomplished before a quantity of very offensive matter escaped, followed by masses much resembling putrefied lung, which were removed by the forceps, but which proved to be the fibrine of coagulated blood, which, acting as a foreign body, had kept up the suppuration. The pleural sac was washed out with water, and carefully explored with the finger, which, however, could not reach the pleura pulmonalis, as the lung was forced upwards and backwards by the long continued compressing force of effused blood and pus. The portion of rib removed exhibited increased ossification, with considerable hypertrophy, as the result of the prolonged inflammatory action in the pleura. But little blood was lost during the operation; the exhaustion was, however, very great—the after effect of chloroform requiring a free use of stimulants. Reaction was slight. The relief to the patient was well marked; his breathing became more free and less frequent. The wound was kept open by pledgets of lint; anodynes at night, with a supporting diet, were administered; and he was directed to make deep and long inspirations frequently, for the purpose of inflating the compressed air-cells, hoping thus to expand the lung, and eventually bring the surfaces of the pleura into contact, and obliterate the sac by adhesion of the costal and pulmonary pleuræ.

For a time the improvement was well marked. Hectic disappeared; the appetite and strength returned; respiration had become deeper and more free from oppression; the left side of the thorax had sunk in front and laterally; the discharge had gradually diminished in quantity, and improved in quality. Still the probe entered the cavity freely. Tincture of iodine injections were again resumed, after previously washing out the sac; but these had to be discontinued, as they caused chills and irritative fever.

The condition of the patient, having remained stationary for some time, suddenly and without any evident exterior cause assumed an unfavourable aspect. An increased discharge of a more offensive matter appeared, with fever, night-sweats, and diarrhœa. Though the empyematous cavity had evidently become much diminished in size, yet, the original cause appearing to continue, on February 11th, 1858, a freer opening in the chest was made by resecting two inches of the eighth and ninth ribs. The interior of the abscess being thus

fully exposed, I was enabled to explore it both by the eye and finger. The diaphragm could be felt and seen; the pulsation of the heart was visible. The lung was found pushed backward towards the mediastinum; and the entire pleura, both costal and pulmonary, was covered with soft pale gray dirty fungous granulations (pseudo-plastic membrane), the evident source of the continuous suppuration. This membrane was carefully removed by spatula and finger from the whole surface, together with some remains of the putrid fibrine. The cavity, extending from the diaphragm to below the middle of the scapula, was so large as readily to admit the head of a child a year old. The lung was pressed backwards four inches; the pleura was thickened; and the ribs were hypertrophied, occasioning some difficulty to resection by the forceps or saw. No bleeding followed; the intercostals being obliterated by inflammatory action, reaction was moderate. The wound was covered with a light bread poultice; opiates were given at night; the chest was daily syringed with infusion of camomile; forced and prolonged inhalations by a tube were practised frequently; decubitus on the left side was advised, which, before the operation, was so painful as to be impracticable. For a few weeks, febrile excitement continued, with bilious derangement and cardialgia. The discharge gradually decreased, and improved in quality; the cough and hectic disappeared; the appetite returned; the patient gained strength, and slept better than at any time since the receipt of the injury.

This decided improvement was some weeks later again interrupted, by accession of fever, sweats, and increased discharge of offensive purulent matter. For this no apparent cause could be discovered, but in the diseased condition of the pleura being liable to change the quantity and quality of its secretion on slight interruption of the healthy standard. To restore it to a healthy state, and induce it to assume that adhesive inflammation which would eventually obliterate the cavity, by the opposing pleural surfaces coming into contact, injections of solution of sulphate of zinc and decoction of white oak-bark were used whilst the patient inclined his head downwards, in order that they might reach the apex of the abscess.

Four months after the second operation, the discharge having gradually decreased, the opening, which for some time had been with difficulty kept from closing, finally became so, the left side having sunk in, leaving the patient in apparently improved health; but soon fever again set in, with pain in the chest, bilious diarrhœa, and purplish spots on the cheeks and lips, which were relieved by the spontaneous opening of the fistula, and a free discharge of thin flaky and bloody matter. On exploring with the finger, the cavity of the abscess was found much lessened, being one inch in a downward direction, three-fourths of an inch in a horizontal, and several inches in an upward direction towards the scapula, and again coated over with those soft, dirty granulations of which it had been freed at the last operation. With a small sponge attached to a probang, the interior of the abscess was cleaned, and tincture of iodine was freely applied over its whole surface, and externally over the chest. This brought away flakes of fungous membrane, on the chest being syringed with water. The production of pus again becoming diminished, the fistula contracted, barely admitting a bougie; yet another attack of fever, with chills, sweating, and bilious symptoms, some time later came on, with increased discharge of a more offensive matter. A solution of tincture of iodine was injected daily, after free syringing, and allowed to remain. This was, some weeks afterwards, discontinued, and an injection of a drachm of caustic potash in a pint of water was substituted, which produced soreness in the abscess, enlarged the fistulous opening, and detached large flakes of the pseudo-plastic membrane, with temporary increase of the discharge, for several days. This injection was continued until the flaky matter had ceased, when camomile infusion was used for injection, and, latterly, decoction of white oak-bark, with occasional syringing with compound tincture of iodine.

The abscess now slowly contracted, both pleuræ evidently coming into contact, the sound entering with difficulty, and only in an upward direction. The fistula was kept open by the daily introduction of a bougie, the injections were now discontinued, only a few drops of thin glairy discharge could be forced out by deep inspiration. The bougie was soon afterwards introduced every second or third day only. All discharge ceasing, the fistula was allowed to close about the beginning of January, 1859.

Though the patient's restoration to health was to be expected from the return of respiratory murmur in the left lung, the flattening of the affected side, and the normal condition of the several organs, together with his healthy and fleshy appearance, yet he was retained an inmate of the Hospital three months longer, and left in the latter end of March, 1859, in perfect health. The left chest measured an inch and a half less than the right across the nipples, but dilated freely on forced inspiration; a leather belt, covering the lower part of the thorax, was advised to be worn, to afford that support which the loss of the ribs required.

REMARKS. Reviewing the history of this case and its result, there cannot be a doubt that the time-honoured practice, in penetrating wounds of the thorax—viz., *the closing of the wound*, after securing the bleeding vessels *as speedily as possible*, lest collapse of the lung should follow the entrance of air into the pleural sac—*is entirely wrong, and ought to be discarded.* It is not true that atmospheric air (a medium which constantly surrounds us, and without which our existence must cease) entering the pleural cavity, will produce collapse of the lung, phlogosis, and its results. Why should its contact after injuries be more hurtful to the pleura than to the other serous membranes lining the great cavities? We puncture the abdominal cavity with impunity, and enlarge openings with protrusion of intestine without apprehension of danger; we even puncture the pleura in hydrothorax or empyema, and have no fear of a bad result; yet we are taught to believe that air entering the chest from wounds inflicted during fights, in a healthy state of the system, and not made for surgical purposes, is fraught with danger. Denying such injurious effects from the entrance of air into the pleura, it is even doubtful if it could enter an incised wound in such quantity as to cause compression or collapse of the lung, considering that the several tissues, skin, cellular membrane, aponeurosis, muscles, and pleura, traversed by the instrument, are of different degrees of elasticity, and that the two sets of intercostal muscles maintain different directions; that the external and internal openings are seldom found exactly opposite each other; moreover, after the infliction of penetrating wounds, the patient becomes in general feeble and faint, the respiratory efforts grow weaker, the thorax is less expanded, and the intercostal spaces collapse. Under these circumstances, air cannot enter by a small opening; but, if it be large and capable of admitting a free current of air with consequent oppression to the lung, the instinctive effort of nature to relieve the lung of the compressing agent by deep inspiration would be called into action, and the air which had entered would be again expelled through the same opening. Thus, it is not the entrance of air in penetrating wounds of the thorax which constitutes the danger, but hæmorrhage and its effects, with consequent inflammation of the thoracic viscera. Bleeding from a wounded artery has to be arrested, yet is it safe to close the wound immediately afterwards, allowing the already effused blood in the pleural cavity to remain? It is true, small quantities will be absorbed; but, if in considerable quantity, filling the sac, and pressing the lung upon itself, the whole cannot be absorbed, and, acting as a foreign body, will produce empyema with grave constitutional irritation.

The correctness of the above theory being fully proved by the result of the foregoing case, as well as by other similar ones, we cannot hesitate to adopt the only correct and safe practice in the management of such cases. The first duty will be to ascertain if the wound be penetrating or not, by a gentle use of the probe. This cannot augment the injury, even though a foreign body (as a broken knife-blade, etc.,) be not detected; it will prove its depth, and, in proportion to its extent, the amount of danger from hæmorrhage or phlogistic action likely to ensue. The thorax should next be percussed and auscultated, to determine the probable amount of blood effused. If internal bleeding has occurred, the wound should be left open, the bleeding arrested by local and general means, and its outward flow encouraged by inclining the body towards the wounded side. The propriety even of enlarging the wound, if small and incised with the bleeding excessive, cannot be questioned; but if the hæmorrhage be moderate, and the wound small, it may be left to itself; if it be large, and effusion great part should be left open, the rest closed by suture or plaster. The danger of secondary hæmorrhage will be thus prevented, by leaving a free exit for effused blood. By local and general antiphlogistic treatment, together with supporting the chest by a bandage, the patient will escape the danger which must otherwise follow so grave an injury.

Conclusively as one case proved the impropriety of early closing penetrating thoracic wounds, the following, taken from my notes, will give additional weight:—

James O'Leary, aged 21 years, was stabbed in 1856 with a pen-

knife, in the posterior part of the left thorax below the scapula, the wound not exceeding three-quarters of an inch. Some bleeding following, he walked to the office of a physician, who, having closed the wound with adhesive plaster, dismissed the patient, with the remark that the injury would not amount to anything. However, great oppression of breathing took place, and in eighteen hours he was a corpse.

The *post mortem* examination, by order of the coroner, revealed profuse effusion of blood into the left pleura from a wound of the intercostal artery, with compression of the lung. The assailant was tried for murder, and convicted on the testimony of O'Leary's attending physician, who, with another practitioner, proved that the wound was mortal, in spite of proper surgery, alleging that the patient could not lose blood enough from the intercostal artery, and that the pleural sac would not hold blood sufficient to cause death. The Governor, however, on application of the friends of the condemned, had him reprieved on the testimony of several surgeons, who, upholding the correctness of our conclusion, were frank to admit that, the wound not being necessarily fatal, bad surgery, and gross carelessness of management, had produced the death of the patient.

Mrs. M. Zimmerman was, in 1845, stabbed by her husband with a shoemaker's knife, into the left thorax under the scapula, between the seventh and eighth rib. The wound, of two inches in length, was immediately closed by a practitioner in attendance. Internal bleeding followed, with orthopnœa, high fever, and pleuropneumonia, terminating in death on the fifth day. I did not see the patient while living, but made the *post mortem* examination, when the broken point of the knife, an inch and a-half in length, was found sticking in the wound between the ribs, its point irritating the surface of the lung. The pleural sac contained a large amount of effused blood from the wounded intercostal artery. Can it be denied that the neglect of probing the wound, and the hasty closing of it, was the immediate cause of this lady's death?

August Lensler, aged 30 years, was, in 1853, stabbed with a broad-bladed knife between the fourth and fifth rib of the right side, posterior to the nipple. The wound was two and a half inches in length; profuse bleeding ensued, the patient becoming anæmic, and pulse flagging. A physician called in had closed the wound by suture; the respiration now became oppressed. I found entire absence of respiratory murmur over right chest, and, removing the stitches, opened up the wound, inclining the patient to the injured side; thus allowing the effused blood to flow out, with decided relief. Ice, with position on the right side, arrested the bleeding; active antiphlogistic treatment, with repeated leeching, moderated the inflammatory action and removed the effused blood. Eventually, his recovery was complete. Considering the immediate relief which the re-opening of the wound, the evacuation of some of the infiltrated blood, with position of the body on the wounded side, produced, can the old practice of early closing the wound, with the intention of preventing the entrance of atmospheric air, be any longer sanctioned?

I need not adduce further proof of the success of a practice in opposition to one, which, though old and venerated, must nevertheless yield to the test of scrutiny and observation. I submit these remarks on the innocuousness of atmospheric air entering the pleura as well as the other serous membranes, to the professional reader, fully convinced that pure air—our most important of the *pabula vitæ*—is not only not the enemy of the surgeon, but rather his friend and helpmate. Air does not compress the lung nor inflame the pleura when admitted to its cavity; it does no more injury to pleura or lung than it does if admitted to the interior of large abscesses when opened. It is true, that large collections of matter, the consequence of deep-seated organic disease, when freely opened, will hasten the dissolution of the patient, as in psoas abscess and some others. Yet, even in these instances, it is not the admittance or admixture of air in these cavities which, by changing the quality of the pus, or increasing its quantity, destroys the patient, but the exposing a large secreting surface of pseudo-plastic membrane, whose vessels, on the evacuation of the contained matter, being freed of the pressure and support of the superincumbent pus, are excited to action, and pour out their secretions in increased quantity and altered quality, on the same principle as an ulcerated surface on the skin, lined with exuberant granulations, will secrete unhealthy matter profusely until supporting dressings close the mouths of the secreting vessels, restrain the growth of the granulations, and thus convert it into a healthy sore, ready and able to cicatrise kindly. Air does not vitiate the matter in large abscesses; but want of support to the lining secreting membrane of their interior allows the pus to degenerate in quality as well as augment in quantity. The patient sinks exhausted by the profuse and continued drain from the system, as much as from long protracted hæmorrhage.

CASE OF BURN IN A NEWLY-BORN INFANT, RESULTING IN LOSS OF THE HAND.

By Wm. Valentine Bird, M.D., M.R.C.S., Seacombe.

Some time ago, a person called upon me to request my immediate attendance at his house. From his excitement of manner, I concluded that something of great importance had occurred, and begged to be informed of its nature. His reply was: "I cannot tell you now; you must judge for yourself when you come." I was shewn into the presence of a girl, aged 18, with a blanched face and anxious countenance, and who, upon examination, I found had been recently delivered. I then demanded the child, which I perceived had had its hand burned to blackness.

Her mistress informed me that when she got up that morning she observed her servant looking very ill, and inquired what was the matter; the reply of the girl being, "Nothing, ma'am; I shall be quite well when I have had a little coffee." Not feeling satisfied, she repaired to her servant's bed-room, and there discovered that the floor had been stained with discharge, which had evidently been recently washed. Her suspicion being thus aroused, she accused the girl of having been confined; and upon asking to see the child, was directed to an immense stove, wherein it had been thrust.

I ordered lime-water for the hand, and simply a mixture of infusion of gentian and tincture of opium to be taken every four hours. The sloughing process continued for a month; at the end of which period, I had merely to pass a knife and disentangle the head of each metacarpal bone, and amputation of the hand was completed. I may remark, that the child took the breast greedily, together with large quantities of mutton broth, to which, and to the soothing effects of the medicine, I entirely attribute its recovery; notwithstanding the opium, however, the slightest movement of the hand caused the poor little thing to scream for hours. It was taken from the neighbourhood in two months with a neat little stump, which it brandishes as a constant memento of its mother's cruelty.

Remarks. The case presents some points of surgical and medico-legal interest, inasmuch as it shows what nature, when assisted, will do in the system of a child so young, and because it affords an additional example of what women, after delivery, are capable of performing. Here we have a young girl delivering herself, washing her own floor (without any binder on, by the way), exhibiting precaution by descending a deep cellar to hide her soiled things, undergoing the anxiety and excitement of destroying her child, with the fear of detection upon her mind; and, joined with all this, the bodily fatigue of changing her clothes, and presenting herself before her mistress as one "quite well", and yet without the occurrence of bad symptoms, or hæmorrhage. So much for emotional feelings in connection with flooding.

The case also leads to this important inquiry—How far are medical men justified in concealing facts, when those facts, although connected with crime, are committed to us in confidence? If permissible, I will quote a few lines from a very sensible leader in last year's Journal, relating somewhat to this inquiry:—

"It is a significant fact, that whereas the professed disciples of auricular confession have every now and then, from time immemorial, been accused of betraying their trust, and have embroiled themselves in intrigues by their compulsory enactments with their followers, no such sweeping condemnation has ever attended the ministry of the medical man. The natural confessions, so to speak, that flow into his ears, the revelations that are necessarily made to him by his own personal observation at the bedside, and the arcana of domestic life that are willingly unfolded to him by virtue of his position, stamp him as a catholic trustee of the hidden things of the conscience. Jew, Turk, infidel, and heretic, alike make him the depository of their sorrows; and we believe his reputation, as a confessor, is seldom impugned, because the attributes which pertain to that character are an inseparable condition of his professional existence."

December, 1859.

Periscope.

PRACTICE OF MEDICINE AND PATHOLOGY.

ILLNESS AND *POST MORTEM* EXAMINATION OF THE LATE PROFESSOR ALISON.

AN article published by Dr. NEWBIGGING in the *Edinburgh Medical Journal* for the present month, furnishes us with the particulars of the illness and *post mortem* examination of the late esteemed Dr. W. P. Alison. The narrative, as the author observes, perhaps owes its interest not so much to anything remarkable in the case itself, as to the distinguished man who was the subject of the disease.

On May 27, 1846, while prescribing for a patient in the Edinburgh Royal Infirmary, Dr. Alison suddenly fell down in a violent epileptic convulsion, which was preceded by a gentle scream or cry. His colleagues were summoned, and Dr. Paterson, now of Tiverton, but then one of the physicians to the Hospital, found him in a few minutes lying on the patient's bed, breathing stertorously, and quite insensible. Thinking that the attack was apoplectic, Dr. Paterson had him bled freely, and he became conscious. Next day, he was apparently in his usual state of health.

From this time to 1850, the fits returned at intervals of about six weeks; two occurring at each attack. In 1850, there were eleven attacks, and sometimes three fits at each attack. In 1851, there were fifteen; in 1852, thirteen; in 1853, fourteen; in 1854, ten. At this time, however, the separate epileptic fits were more numerous and severe, and were followed by formidable cerebral symptoms. In 1855, there were seven seizures; but the fits in all amounted to sixty. In one attack, there were eleven severe fits in twelve hours; and, in another, twenty-two fits from ten o'clock on one day to twelve on the next. In 1856, the seizures were eight, the fits eighty-six; in 1857, the seizures were seven, the fits sixty-two; in 1858, there were seven seizures, and fifty-four fits; in 1859, the seizures were five, the fits fifty-nine.

In 1859, the attacks became less numerous; but the fits gradually increased in severity. The delirium assumed more and more of the maniacal character; and, latterly, the difficulty of restraint, even with the assistance of two or three male attendants, was very great. Dr. Newbigging had been accustomed to give Dr. Alison, during the stage of sleeplessness and irritability, henbane with camphor and prussic acid. In March last, however, large doses of solution of morphia in antimony were ordered to be given when signs of delirium appeared. This, in several attacks, produced sleep after about five doses had been given, after which he awoke calm and recovering.

Dr. Alison's last attack of illness commenced in August 20, when he had six severe fits, some of a slighter character. The records of the case, down to the 22nd of September, on which day he died, indicate, especially from the 1st of the month, daily and frequent changes from comparative quietness to complete maniacal excitement, until within a few days of dissolution, when his state resembled that of a person sinking under an attack of typhoid fever.

The *post mortem* examination was made about twenty-two hours after death, in the presence of Professor Goodsir, Drs. Smith, Andrew Wood, Skae, Brodie, W. T. Gairdner, Haldane, and Newbigging.

External Appearances. The body generally, but more particularly the face, was much emaciated. The cadaveric rigidity was generally moderate, but the muscles of the neck were so firmly contracted, that they supported the head when the pillows were drawn from below it.

Head. The scalp was thin, and almost perfectly bloodless. The skull-cap was of moderate thickness; there were some pretty firm old adhesions between it and the dura mater. On proceeding to remove the dura mater, it was found that the falx cerebri was very extensively ossified; its anterior portion (almost quite up to its insertion into the crista galli), for an extent of rather more than three inches, being converted into a firm bony mass, which had a rough irregular surface, presenting elevations and depressions which had corresponded to the sulci, and convolutions of the adjoining portions of brain; posterior to this large mass, there was a small ossification (about half an inch in length by a quarter in depth). On removing the dura mater, a quantity of clear serous fluid escaped from the cavity of the arachnoid. The membranes of the brain had a semi-opaque, milky appearance; there was considerable œdema of the pia mater, and much serous fluid upon the surface of the brain. The brain was removed before the ventricles were opened into, so that the quantity of serum contained in them could not be exactly ascertained; but as each lateral ventricle was much dilated, they must have contained at least two ounces of serum. The cerebral substance was healthy, though the walls of the lateral ventricles were rather soft. The cerebellum and pons were natural. The weight of the encephalon was 52 oz. av. There was considerable ossification of the arteries at the base of the brain.

Thorax. There were some old cellular adhesions on each side of the chest. Both lungs were a little emphysematous anteriorly; congested and œdematous posteriorly. The heart weighed 14 oz.; its muscular substance was soft and flabby. The aortic valves were natural; the mitral valve was contracted, barely admitting the points of two fingers; its edges were thickened. There was a moderate degree of atheroma of the ascending aorta.

Abdomen. The substance of the liver was natural. The gall-bladder was completely filled with gall stones of an irregularly cubical form, presenting smooth facettes; they consisted of cholesterine coloured with bile pigment. There was not a trace of bile in the gall-bladder, but a small quantity of a whitish glairy mucus. The cystic duct was obliterated. The other ducts were natural. Each kidney was closely surrounded with fat, which also extended to a considerable extent into the pelves of the organs. The glands were rather smaller than natural; but with the exception of pretty numerous cysts, which varied in size from that of a small pea to that of a pin point, were sound in structure. No other lesion was found.

PNEUMONIA: PRODUCTION OF ÆGOPHONY.

AT a recent meeting of the Association of the King and Queen's College of Physicians in Ireland, Dr. LAW read a paper on a case of pneumonia which he had had under his care in Sir Patrick Dun's Hospital. The inflammation had occupied a very large portion of the left lung, occurring in a young man of 23 years of age. The case had been treated by the administration of minute doses of calomel frequently repeated. Dr. Law is often able to produce salivation with three and a half or four grains of calomel, by giving but the twelfth of a grain each dose, and repeating it every hour. He considers that the system becomes more easily affected by the mercury if it be combined with small doses of tartar emetic. In the present case the disease was completely got under in five days. In the course of his observations, Dr. Law combated the opinion of Laennec as to the manner in which ægophony was produced. He did not think that great author correct in attributing the peculiar sound referred to, to the action of the voice in causing a vibration in the fluid effused in pleuritis, but rather believed it to be due to the vibration in the compressed lung, and looked on ægophony and bronchophony as produced by different degrees of compression. He held that there might be ægophony without any effusion into the cavity of the pleura. (*Dublin Medical Press*, January 11.)

FOREIGN BODY IN THE AIR-PASSAGES FOLLOWED BY UNUSUAL RESULTS.

IN the North American *Medico-Chirurgical Review* for September, 1859, Dr. E. J. FOUNTAIN, of Davenport, Iowa, reports an interesting case of foreign substance lodged in the right bronchial tube, which resulted in abscess, or gangrene of the lung, which perforated the diaphragm and discharged its fœtid contents into the colon. The patient was a lad of ten years. The foreign body was the round head of a thigh-bone of a chicken. A diffused tumour made its appearance over the lower border of the ribs, accompanied with great tenderness and pain, about the fortieth day after the accident. About fifteen days later, fœtid pus, in frequent evacuations, began to pass the bowels, to the great relief of the patient. The tumefaction passed away, but the cough still remained troublesome. About a month after the rupture of the abscess, the patient coughed up the bone, and from this point recovery was rapid. The case was, by one or more of the physicians who saw it, considered to be one of hepatic abscess. (*American Medical Monthly*, November 1859.)

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, JANUARY 21st, 1860.

QUACKS ABROAD AND AT HOME.

The trials and very just convictions of the professed cancer-curers Vriès and Martinez in France, the particulars of which will be found in another column, possess a peculiar significance and value to the medical profession at home just at the present moment, when one of this fraternity declares himself among us, habited in the seductive garb of the priest. The "Black Doctor", it appears, pretended to his patients that he had received supernatural revelations; and thus having wormed himself into their confidence, he declared, like the Rev. Hugh Reed, that he had discovered his specific against cancer in the tropical regions. His method of proceeding, as regards payment, was very similar to that adopted by the Bennett gang, and by that obscure race of quack doctors who fill the advertising pages of our country papers. He demanded a handsome sum down, and stipulated for the remainder on the extirpation of the cancer. In this manner he obtained sums of money in some instances as high as 10,000 *francs*, which sums he proposed to return in case of failure—a promise which, it is scarcely necessary to say, he never performed, excepting in one case, when he unluckily certified a cure a short time before the patient died. Like hundreds of quacks in this country, he committed his depredations under the assumed title of a Doctor of the Faculty of Leyden, the falsehood of which assumption was clearly shown.

We wish to draw the attention of the profession, however, to another offence against the French law, which was proved against him; namely, "that he likewise offended against the laws on pharmacy, by selling and distributing medicines without being provided with a *pharmacien's* diploma; and that, at the same time, he has prepared and sold substances not inscribed in the *Codex*, and having the character of secret remedies." It does seem extraordinary that, with respect to medicine, the practices and habits of France and England should be so completely reversed as they are. We have abolished secresy in every department of our Government; even in the Post Office, perfect publicity is the paramount law and custom of the land. Nevertheless, we permit the sale of secret remedies of all kinds, without let or hindrance. Holloway ships his hundreds of tons of pills, and Morrison does the like. Hannay and Dietrichsen, one of our largest chemical firms in London, are the agents of thousands of patent or secret medicines. Not only does the Government refuse to punish the venders of such popular poisons, but it actually shares the plunder in the shape of the stamp. In France, the land of secresy in all governmental offices, we see a totally opposite policy practised in matters where the health of the subject is concerned. I "Professor" Holloway attempted to sell a box of his purgation in Paris, fine and imprisonment would await him. It must be confessed, "they manage these matters better in France". The "Black Doctor" expiates his offence against the French law by imprisonment for fifteen months, and by a fine of 500 *francs*. Our patent poison venders make fortunes by the countenance and assistance of our free government!

The case of Martinez, in some points, shows the severity of the French law against the charlatans even more strongly than that of Vriès. Martinez was an *officier de santé*, and therefore to a certain extent a legally qualified man. He, like Vriès, promised a radical cure of cancer; like Holloway, he announced innumerable cures in the public papers; and, like Fell, his treatment consisted "in the application of violent caustics to the afflicted part, causing the patients to suffer long and terrible agony, and destroying and hardening the flesh." Whilst applying the infernal dressing, he surrounded himself with mystery, not even allowing the nearest relatives of his patients to be present, and attempted to satisfy the minds of friends by exhibiting pieces of burnt flesh to them as samples of the extirpated cancer. The performance of this operation did not render him liable to the charge of having violated the law with respect to the performance of a surgical act. The French law, we believe, prohibits the *officiers de santé* from venturing on "capital" surgical operations; but it permits them to perform those of the "minor" class. Martinez was therefore protected from the charge of violating the laws regarding surgery. Possibly, if he had been in the position of our clerical cancer-curer, who by the use of painful topical applications interferes with the surgeon's art with impunity in this country, he would not have escaped on this charge.

Martinez improved upon the method of Vriès as regards his method of procuring money; inasmuch as he not only obtained payment in advance, but often, in order to extort further sums, threatened to leave off all treatment of his patient. In this respect he manœuvred like the syphilis quacks, who intimate to their frightened victims that, unless they bleed *ad libitum*, they will leave the half eliminated poison to do its horrible work at will. Martinez received the severe sentence of five years imprisonment, and a fine of one thousand *francs*.

The *Times*, in a leader on the case of the "Black Doctor" has the following admirable remarks:—

"It is a pity that we had not some more handy method—as they have in France—of dealing with our more notorious and mischievous quacks. The amount of misery and suffering entailed upon human beings by them is quite indescribable. The probability in cases of cancer is, that the disease was incurable; but that is no reason why the friends of the patients should be tortured with false hopes, and the patients themselves be subjected to useless agony. A distinction might, no doubt, be made in favour of the persons who employ only harmless agents—it might be sufficient if they were simply punished for obtaining money under false pretences. *In all cases, however, where agents have been employed productive of suffering without possible beneficial result, and that by persons who neither by education nor practice have a right to style themselves professors of the medical art, a sterner punishment might be inflicted with advantage.* We are well aware, however, that in England we should have but little chance of bringing a 'Black Doctor' to justice; exposure is the instrument upon which we must mainly rely for the punishment of quacks."

We have italicised the above passage, as, in our opinion, it bears decidedly on the case of the Rev. Hugh Reed, who sprang into notoriety simply through the publicity given in that periodical to his astounding charlatanry. Do not these words apply to him with the utmost exactitude? We think that they do; and we cannot help lamenting, with the leading journal, that "we have not some more handy method, as they have in France, of dealing with our more notorious and mischievous quacks."

DR. BARKER AND MR. CHAVASSE.

WE publish to-day a letter from an old and faithful associate, on a matter painfully personal to him, and no less suggestive of deep regret to all members by whom old friendships are valued. So long as Dr. Barker of Bedford, and Mr. Chavasse of Birmingham, were engaged in carrying on in a contemporary periodical a heated contest, in which much more than the legitimate weapons of dispute were too often employed, we refused to be drawn into the controversy, or to open our pages as an arena to the combatants. At the same time, standing independently of both parties, and desirous of seeing a renewal of peace and friendship between them, we suggested that the whole question under dispute should be submitted to arbitration. It is satisfactory to know that the course we then pursued has met with general approval; and we wish we could say also that our suggestion had been adopted. If on the present occasion we apparently turn aside from our course in alluding to the subject, we do so in the confident hope of being able to promote a reconciliation on satisfactory terms.

We shall not enter into the nature of the dispute. Its outline is fairly enough stated in Dr. Barker's letter; and for the rest, the profession knows already too much of it. Our present object is to reconcile; and to express that, whatever errors of judgment or of expression Dr. Barker may have committed in his haste, he has now, on calm reflection, offered as complete an apology for all as one gentleman can convey to another. We wish further to express the hope that friendship may now be restored; and that the Association may be preserved from the disgrace and injury which must attend a continuance of hostilities.

We hope, moreover, that, peace being restored, Dr. Barker will withdraw his resignation. Regretting much that he has done in this affair (offending therein against none so greatly as against himself), we feel that our Association cannot look with indifference on the loss of one whose labours have been so energetic, or let him depart without a word of friendly remonstrance. Our duty would be neglected if we did not endeavour to call him back to the fold and to his work. He has been a member for many years; he took the initiative in founding a new Branch, and in thereby greatly increasing the strength and influence of the Association in his district; he has contributed in no inconsiderable degree to the literature of the JOURNAL; he has made large additions to the science of medicine; and he has shewn an amount of industry and talent for observation by no means common or to be neglected. We trust sincerely that no temporary shade of the present nature will be allowed to interfere with a long continuance of his labours.

We must now say a friendly word to Mr. Chavasse. We know that he regards himself as deeply aggrieved; and we acknowledge that his provocation has been great. But we now earnestly entreat him, and all whom Dr. Barker has offended in the matter, for the credit of our profession, to accept Dr. Barker's explanation and apology as heartily as they are offered. We leave the decision to their good feeling.

Of the action of Dr. Barker's colleagues in the committee of the South Midland Branch we know nothing, beyond what we gather from Dr. Barker's letter. It appears therefrom, that they have passed some severe resolutions in respect to his conduct in the dispute between him and Mr. Chavasse. What the resolutions are, we do not know, and do not wish to know. We are willing to give the members of the committee, whom we know in general to be honourable men, the full credit of having acted conscientiously. We now beg them to reconsider their vote, whatever it may have been; and to give us their hearty and powerful aid in bringing about that reconciliation for which Dr. Barker's letter affords so fair and substantial a foundation.

THE WEEK.

OUR news columns to-day record the appointment, by Her Majesty the Queen, of Sir Charles Hastings as Deputy Lieutenant of the county of Worcester. It is merely necessary for us to bring this fact before the notice of our associates, who will, we are sure, join us in congratulating Sir Charles on his new dignity, and in wishing him for many years a happy enjoyment of the honourable post which has been conferred on him.

At the meeting of the Academy of Sciences in Paris, on December 26th, 1859, M. Leverrier made the following interesting communication. Dr. Lescarbault, a medical man in busy practice at Orgères, in the department of the Eure-et-Loire, is also a zealous astronomer, and a man who supplies by his ingenuity the deficiency of the means which he possesses for prosecuting his favourite science. In March last, M. Lescarbault observed the passage over the sun's disc of a planet within the orbit of Mercury; and he communicated the fact to M. Leverrier, who had noticed certain perturbations in the motion of Mercury, that, in his opinion, could only be explained by the presence of another planet. This was in September last; and thereupon M. Leverrier visited him, together with M. Vallée, and had been enabled to confirm the title of M. Lescarbault to the discovery. The correctness of the results obtained by him was the more remarkable on account of the paucity of his instruments. On arriving at Orgères, M. Leverrier found a regular observatory, with instruments, chiefly contrived by the doctor himself, whose finances were limited. Not having a chronometer, he had made himself a pendulum, striking seconds, by means of an ivory ball and a bit of string. Notwithstanding the clumsiness of his apparatus, the calculations of M. Lescarbault varied less from those of M. Leverrier, than those of the most eminent astronomers sometimes do from each other. For want of paper, Dr. Lescarbault had generally written down his observations with charcoal on a deal board; which, with the doctor's calculations written on it, was presented to the Academy by M. Leverrier.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
METROP. COUNTIES. [Special General Meeting.]	32a, George Street, Hanover Square.	Tuesday, Jan. 31st, 8 P.M.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, JANUARY 2ND, 1860.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

SUGGESTIONS FOR UTILISING THE STATISTICS OF DISEASE AMONG THE PAUPER POPULATION. BY GAVIN MILROY, M.D.

FOR the care of the 14,963 parishes and unions in England and Wales, there are upwards of three thousand medical officers employed, under the general superintendence of the Poor-law Board; and the yearly public expenses for the relief thus afforded to the poor are estimated at a quarter of a million sterling. The entire number of paupers three months ago* was, in round figures, 850,000, of whom 111,500 were inmates of workhouses, and the rest were receiving outdoor relief, and consequently living in their own dwellings.

Now, supposing that there is little more than a single attack of illness in the course of a twelvemonth to each pauper—an estimate very much below the probable mark—we have at once an annual register (for every case is required to be entered) of a million recorded cases of sickness, among that very portion of the population, too, whose condition it is most important for the public welfare to ascertain. Moreover, besides the regular paupers, a large proportion of the poorer labouring classes are in sickness treated by the parochial medical officers.

Hitherto the immense mass of statistical information in the returns made by these gentlemen has never been explored or turned to any account; nor can it be, until some system be adopted to tabulate and collect the leading facts. We know nothing, as we ought to know, as to the most frequent disabling diseases in different towns, villages, and rural districts, among the poor; nor the influence of age, sex, condition, and employment, in their production. And yet most valuable data upon all these points might be obtained from the returns which the medical officers are required to make for boards of guardians, and which thenceforth most unfortunately cease to exist.

The mortuary returns afford a very imperfect idea of the suffering, disablement, and wretchedness, occasioned by any malady. Take an example. On an average, sixteen thousand persons die yearly in England and Wales from continued fever. This number of deaths probably represents little short of two hundred thousand cases, of a disease, too, which experience has proved to be all but under direct control and prevention as regards its causation, and which is also one of the most frequent occasions of pauperism among the families of the poor.

If we suppose that there are between twenty and thirty cases of sickness for every death,—knowing, moreover, that from fifty to sixty thousand annual deaths in this country may be regarded as premature and avoidable,—there must be, at the very lowest estimate, more than a million attacks of illness every year which might be prevented by greater attention to the *hygienic* condition of the labouring classes more especially. No wonder, then, that three-fourths of all the actual paupers in the country have been made paupers, directly or indirectly, by disease.

The public interest demands that all authentic means of elucidating this great social problem should be brought into requisition; and no plan can be better than that which has been followed with such good results in other departments of the public service. Five-and-twenty years ago, no use was made of the constantly accumulating medical returns of our army and navy in reference to the average annual amount of sickness, mortality, and disablement, among our soldiers and sailors, although it had been long suspected that the rates were excessively high. The statistical returns and reports since published have afforded the groundwork for almost all the salutary changes which have been already effected, or which still remain to be effected, in both services.

Were something of the same sort done with the mass of instructive details contained in the returns and reports of the parochial medical officers, equally beneficent results would ensue to the poorer classes, who suffer a disproportionate amount of sickness and death from circumstances not inevitable or inseparable from mere poverty, but which is superadded to it from either the ignorance or the criminal neglect of those who have it in their power to prevent its production. An annual report, founded upon an examination of these documents—or rather of a simple tabulated register of their leading results, according to a form submitted to the meeting—could not fail, in conjunction with the admirable yearly report of the Registrar-General, to be of the highest value to the science of public hygiene and topographical medicine. The tabulated returns would, of course, have all to be transmitted to the Poor-law Board, and there examined and digested by a competent authority. This scheme could only be successfully carried out, it is obvious, by securing the willing cooperation of the parochial medical officers throughout the kingdom. These gentlemen have, however, always shown themselves among the most active promoters of every rational proposal for improving the social condition of the poor, and for advancing the best and highest aims of the healing art. If it were as easy, Dr. MILROY observed, to overcome official inertia and the unwillingness of governmental departments to introduce any change in established procedures, as it would be to enlist the sympathy and assistance of our professional brethren to the measure suggested, the prospect of something being done would probably not be very remote. It will not be from the medical officers that the chief obstacle to the project being entertained is to be looked for. Their cooperation has to be but solicited in the right channel, and that cooperation will be ere long very generally accorded, on grounds purely beneficent and scientific. The sanitary inquiries instituted twenty years ago, at the instance of the Poor-law Board, and which issued in obtaining the authentic information respecting the domiciliary and general condition of the working classes on which all the recent legislation on public hygiene has been in a great measure founded, owed most of their value to the important evidence of parochial medical officers in different parts of the country.

Besides the duty of preparing the annual report on the sickness, etc., among the poor throughout the kingdom, the services of a competent officer in connexion with the Poor-law Board might be signally useful in various ways. The state of many of the workhouses calls for inquiry, and no one obviously could do this so efficiently as a gentleman who would have to make himself acquainted with the state of all of them. The single fact that the number of deaths in the metropolitan workhouses has constituted the eleventh or twelfth part of the whole mortality of this great metropolis, will suffice to show the magnitude and importance of the interests involved in such an investigation.

A discussion followed, in which Dr. J. Bird, Dr. Camps, Dr. Babington, Dr. Aldis, Mr. Radcliffe, and Dr. WcWilliam, took part.

* The paper was written in the early part of 1858, and submitted at the time to the consideration of the Poor-law Board, who undertook to give it due attention.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 10TH, 1860.

F. C. SKEY, Esq., F.R.S., President, in the Chair.

THE INFLUENCE OF TROPICAL CLIMATES ON THE RISE AND PROGRESS OF INFLAMMATORY AFFECTIONS OF THE WOMB. BY E. J. TILT, M.D.

THE scantiness of our information upon this point was first noticed by Dr. TILT, whose attention had been drawn to it by having had to attend, during the last ten years, patients invalided by uterine inflammation, in the East or West Indies, in China, and Brazil. Proceeding to investigate the etiology of uterine disease amongst Europeans in tropical climates, Dr. Tilt took India as an example, and pointed out how, even if the menstrual function had been previously regular in young women going out to India, it became irregular from travelling and the sea voyage; how, without passing through a period of repose, on arriving in India, and before the menstrual function had had time to "right it itself," these emigrants were launched into the fatigues and gaieties of society, often marrying at too

early an age, and even before menstruation had become regular. Dr. Tilt observed that, little accustomed to the heat of India, the inexperienced European often imprudently exposed herself, during the menstrual period, to the raw, chilly night air, or to the north-wester, or made too frequent a use of cold water at that time. The pathology of tropical climates was represented as being principally abdominal, Europeans becoming occasionally subject to liver disease and dysentery, which tend to produce uterine inflammation, even when they occur in temperate climates. The frequent liability of the European to some form of intermittent or remittent fever was insisted on, as well as the fact that these affections sought out the weakest organ, increasing its tendency to congestion and inflammation. Another cause of uterine inflammation was found in that anæmia and intense debility which usually followed a prolonged residence in a tropical climate.

The progress of inflammation of the womb, in Europeans, during their residence in tropical climates, was described as unusually rapid, owing to the patients remaining subject to those climatorial influences which had produced the disease.

The pathological conditions of those who return to Europe from the tropics on account of uterine disease were next inquired into. The inflammatory lesions, as well as the general symptoms, were represented as unusually severe, considering the duration of the complaint. It was stated that, even after their return to England, the march of uterine inflammation is often complicated by partially subdued tropical complaints, such as ague, remittent fever, liver derangement, and chronic dysentery. These complications were spoken of as interfering with the treatment of the case, and protracting it much beyond its usual duration; the uterine inflammation requiring surgical treatment, in accordance with the principles laid down in the author's and in Dr. H. Bennet's work on *Uterine Inflammation*, without, however, neglecting to take into serious account those complications which frequently arise, or that deep-rooted debility which seems to be sometimes the only reason why the patient will not rally, although judiciously treated.

Dr. Tilt concluded by observing that he had sometimes seen young women taken to India in whom the menstrual flow was so irregular as to preclude the possibility of health being long preserved in a tropical climate; that he had attended patients whose health had been ruined by too long a stay in India, after uterine disease had become severe; and others who, having returned to India before they were quite cured of an inflammatory affection of the womb, were soon obliged to come home on account of a severe relapse of the uterine complaint: and this led him to recommend the following practical rules relative to the prevention of uterine inflammation amongst Europeans in tropical climates:—

1. Those in whom the menstrual flow is habitually morbid in a temperate climate should not settle in a tropical region.

2. Those who have frequently suffered from inflammatory uterine affections in a temperate climate should not settle in a tropical region.

3. Those who become severely afflicted with uterine disease in a tropical climate should remove to a temperate one.

4. Those who come to Europe for the cure of an inflammatory affection of the womb from a tropical region should not return to it until some months after the uterine affection has been cured.

Sir JAMES MURRAY eulogised the use of oxyphosphate of iron as an injection in uterine affections. It was prepared by precipitation from a solution of red oxide of iron and muriatic acid by phosphate of soda. The precipitate, being well washed with distilled water, was brought to a pasty consistence, and rubbed up with mucilage for the purpose of detaining it where it was to be lodged, and also to blunt any acrimony or ulcerations existing in the passages. He suggested that in some cases it was absorbed into the system, as he had seen many women attain to a healthy appearance after its use as an injection, though previously they had been worn and anæmiated by disease and the influence of hot climates.

BRIEF NOTES OF A VISIT TO THE LEPER HOSPITAL AT GRANADA.

BY J. WEBSTER, M.D., F.R.S.

The author, having recently visited the ancient Leper Hospital founded at Granada by Ferdinand and Isabella upwards of 350 years ago, brought before the Society some facts respecting that institution which he thought interesting. Last September, Dr. WEBSTER found 53 inmates, 39 being male, with 14 female patients, and thereby showing the greater frequency of lepra amongst the former than the latter sex, which has always been a characteristic feature of that malady. It affected persons of every age, from a girl in her fourteenth year to others who had passed their climacteric. The disease also exhibited various conditions, some inmates being recent sufferers, while others had arrived at the last stages; the face, neck, and arms appearing the parts usually attacked. In advanced cases, the malady even assumed a cancerous aspect, parts of the face, nose, and mouth then becoming ulcerated, so as to produce a hideous expression. Several were bedridden, and some like a mass of bodily corruption. One remarkable symptom Dr. Webster specially noticed, even in those quite helpless—viz., almost invariably they seemed happy and contented with their sad condition, the inmates generally being merry, singing, and enjoying themselves, either when idle, or occupied in their work-rooms. This characteristic, the director told Dr. Webster, was common amongst leprous patients; and also that many were lascivious in their conversation, and would be so in conduct, were great care not taken to keep both sexes separate, the *libido inexplebilis* noticed by ancient authors being a prominent pathognomic phase of true leprosy. The author next alluded to the districts where this disease oftenest prevailed in Spain, and stated it was most common on the south-eastern coasts of the Mediterranean, but very rarely in the interior. The disease would also appear to be increasing amongst the Spanish population, more victims being now recognised than formerly, 284 lepers having been ascertained as alive during 1851, in only nine provinces. Contrasted with England, this fact is remarkable, since leprosy is now very rarely met with amongst natives who have never left Great Britain, but where the malady throughout more ancient times was so frequent. The last instance of true lepra in England with which the author was cognizant as being really indigenous was one under Dr. Addison, at Guy's Hospital, and reported by Dr. Wilks. This patient had lived twelve years in Croydon and London, after leaving Cork, his native city, but never visited any other country; notwithstanding which he was attacked with the malady, as shown by a drawing exhibited to the meeting through Dr. Wilks' kindness, which Dr. Webster said exactly resembled similar cases seen at the Granada Leper Hospital. The author next adverted to the causes which seemed to produce leprosy. Hereditary tendency, he thought, did not appear to have any influence; being born and living in districts where leprosy prevailed appeared much more powerful, especially when dwelling in insalubrious localities. Defective diet, filth, and poverty also conduced to its production. In short, the author stated that lepra, in his opinion, was analogous to cretinism, goitre, pellagra, or ague, and might be very fairly classed in the category of endemic diseases. Subsequently, Dr. Webster remarked that lepra rarely, if ever, attacked the middle classes or persons removed from poverty, and that it was almost confined to maritime districts or amongst a marine population. Respecting the treatment of leprosy adopted at the Granada Hospital, the author reported that very little benefit followed any plan pursued, as the disease generally proved fatal after its continuance from eight to ten years, and in spite of any remedy employed. Attention to diet, cleanliness, frequent bathing, proper clothing, the judicious employment of patients in manual occupations, according to their physical strength and individual capacity, by remaining much in the shady court-yards or adjacent gardens of the institution, where an open, pure air could be breathed, and aided by recreations, good effects towards alleviating the sad conditions of inmates might, however, be obtained. In fact, the system pursued resembled, as the author added, that commonly followed at well regulated lunatic asylums. After making other remarks, Dr. Webster, concluded his communications with the following inferences, based upon previous statements, which he thought might be legitimately deduced:—1. Leprosy chiefly affects the male sex, as it has always done heretofore. 2. All ages are liable to its attacks after puberty. 3. The malady is not infectious, in the strict sense of that designation. 4. It seems to be endemic. 5. It occurs only amongst the lower ranks of society at present. 6. Residents on the sea-coast are its chief victims. 7. The principal apparent causes are, putrid, indigestible aliment, poverty, filth, occupying insalubrious dwellings in marshy, miasmatous soils, and a humid, variable, marine atmosphere; while it may be communicated by inoculation. 8. The disease is incurable, and all medical treatment proves unavailing. 9. Lastly, although true leprosy is now nearly extinct, having almost disappeared from every other European country excepting Norway, it still prevails to a considerable extent in Spain, especially amongst poverty-stricken natives, living on, or near, the southern Mediterranean shores of that peninsula.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 16TH, 1860.

JOHN HILTON, Esq., F.R.S., President, in the Chair.

CLINICAL COMMUNICATIONS.

Artificial production of Endocarditis. Dr. RICHARDSON brought before the Society the body of the dog he had exhibited at the meeting on December 12th, 1859 (JOURNAL, Dec. 17th, 1859, p. 1030). The animal was then suffering from heart-disease, attended with regurgitant systolic murmur; such disease having followed upon feeding the animal for eight weeks on a diet of sugar and decomposing casine with water. Since the time when the animal was last shewn at the Society, he had been kept on animal food; but the systolic *bruit* had continued. One hour before the present meeting, death had been rapidly produced by chloroform. The heart, having been removed from the animal by Mr. Schofield, in the presence of the Fellows, was handed round. The tricuspid valve was thickened throughout, and was white and almost cartilaginous. One curtain was bound firmly down to the heart, and was greatly thickened. The mitral valve was even more diseased; its margin was lined with large, firm, white beads; and its curtains were thickened, cartilaginous, and irregular. The semilunar valves were healthy.

Dr. Richardson also presented the heart of another dog. This dog had been put on the same diet, and had been kept on it for seven weeks. The heart-sounds offered no peculiarity for the first month; then the action of the heart became irregular, and the first sound was heard indistinctly. Dr. Richardson, after observing the animal daily for seven weeks, and finding no murmur, thought the experiment a partial failure. Five days afterwards, however, the animal died suddenly; and the heart was found extensively diseased. The tricuspid valve was white and thickened; and one of its curtains was adherent to the muscular wall. The mitral valve was beaded along its whole border; and one of its curtains, greatly thickened, was fleshy looking at the margin.

The pathological conditions in both cases were obviously but different stages of the same disorder; the first one marking a stage far advanced, the second an earlier stage. The author dwelt on this point; and shewed, from drawings taken from cases of endocarditis produced by the injection of lactic acid into the body, that the condition induced by the present process was the same in every particular.

A discussion followed, in which Drs. Routh, Cockle, Hare, Hawksley, Camps, and Mr. Canton, took part. The discussion turned chiefly on the possibility of diagnosing tricuspid from mitral murmur. It is understood that, on Monday week, Dr. Richardson will read a special paper, bearing fully on the whole series of his experiments on endocarditis.

Pulmonary Calculus. Dr. COCKLE exhibited a calculus, one inch long and one-fourth of an inch broad, from the right lung, which had given rise to symptoms of phthisis pulmonalis. A man, nearly 60 years of age, had formerly been in the army for fifteen years, and was eventually discharged for asthma. He was subsequently a private watchman in the city. After a time, he complained of pain below his right clavicle, more difficult breathing than usual, and spat much muco-pus, mixed at times with blood. He now became weak, rapidly emaciated, with excited circulation, and profuse night sweating. The principal physical sign was marked cracked pot sound under the right collar bone, near the spot where his pain was felt. After this condition had lasted several weeks, early one morning he was suddenly attacked with most violent, uncontrollable, and paroxysmal cough; as, also, alarming paroxysmal dyspnœa. After thus suffering for three hours, he expectorated the larger calculus; and on the following day, with less distress, the smaller one. Little doubt existed but that the mass formed in one division of the right bronchus had become detached in the night, and had developed all the phenomena which characterise the presence of a foreign body in the air-passages. His local and constitutional symptoms at once mended, and he recovered a very tolerable share of health. Some months subsequently, he died from bronchitis grafted on emphysema, combined with a weakened and fatty heart. On *post mortem* examination, the lungs were found to be emphysematous. The mucous membrane of one division of the right bronchus was thick, swollen, and lined thinly, near its end, with calcareous matter. Not a vestige of tubercle existed in either lung. One point in the history of large pulmonary calculi was indicated as interesting; that is, their present rarity as compared with the past. Very large calculi are mentioned by the writers of the last century as giving rise to symptoms similar to those now detailed. The present specimen had of course lost much of its original weight and apparent size.

Diseased Mitral Valve. Dr. COCKLE also exhibited a specimen of disease of the mitral valve. He considered it interesting, as forming exception to the law which commonly obtains with respect to the influence of extensive disease of this orifice upon the remaining chambers of the heart. Generally, such change not only induces thickening of the left auricle, but transmits the influence to the right side, causing the heart to assume a globular shape, the right ventricle forming the rounded apex of the organ. The heart, submitted to the Society, was removed from the body of a man brought in dead to the Royal Free Hospital. He had been long subject to disease of the heart. The mitral valve was most extensively diseased; one curtain was nearly a solid mass of calcification; the other curtain was greatly affected with atheroma, but capable of a certain extent of movement. The left ventricle was in a state of considerable dilated hypertrophy. The left and right auricle were slightly dilated, and so attenuated that in many places the muscular tissue was entirely absent; the endocardial and pericardial membranes being in immediate contact. The right ventricle was of nearly normal size, perhaps slightly thickened, but very small compared with the left ventricle; the right ventricle did not descend to the apex by nearly three-fourths of an inch.

New Medical Inhaler. Dr. HAWKSLEY exhibited an apparatus for inhaling steam or medicated vapours, the invention of Messrs. Godfrey and Cooke, which he thought supplied several useful desiderata. Consisting in principle of a short tube about two inches in diameter; the lower part is filled by a sponge, through which boiling water is passed, and from which the steam for inhalation is derived; and the upper part contains a smaller sponge, on which the medicament proposed for use is placed. It is surmounted by a wide wooden mouth-piece, through which inhalation is practised with perfect ease. The instrument is remarkably small and light; and the patient can lie in any position while using it. Dr. Hawksley said he had found it very serviceable.

Instrument for applying Fluids to the Larynx. Mr. THOMPSON exhibited an instrument for the local treatment of affections of the mucous membrane of the throat and larynx. It consists of four parts—bellows, flask, adjusting apparatus, and nozzle. The bellows contain three internal springs, by which their upper surface is raised, and the bellows are then inflated. The flask has an egg-shaped body with two necks, one for ingress and the other for egress. The former is curved, and is connected by four feet of elastic tubing and an union joint with the bellows; while the latter rises perpendicularly from the body. A glass cylinder, traversed by about sixteen capillary tubes, rises from the bottom of the flask to the upper part of the perpendicular neck, where it is retained in position by a silver spring. The adjusting apparatus is connected with the perpendicular neck of the flask, and has a tube which can be more or less approximated to the top of the glass cylinder. The nozzle, which is connected to the adjusting apparatus by an union joint, has its remote extremity curved at a right angle with its shaft, and is there furnished with a screw cap for the inclosure of a plate of fine silver wire gauze. The instrument is charged by unscrewing the union joint of the nozzle, and pouring into the flask about half a drachm of the required fluid. The bellows being full of air, the tongue of the patient is depressed and drawn forward by the operator's left hand, and the nozzle is introduced to the posterior fauces by the right hand. The operator, covering the opening in the top of the bellows with his foot, presses them down; the air is thus forced through the elastic tube into the flask; but, being unable to escape therefrom with the same rapidity, on account of the relatively smaller opening between the glass cylinder and the adjusting tube (which is regulated by turning the screw of the latter), it becomes condensed, and, by its increased pressure upon the surface of the medicated liquid, raises this to the summit of the capillary tubes, while at the same time the air, which will have passed the obstruction, has acquired increased room for expansion. The liquid, carried by a strong current of air, passes to the nozzle, along which it passes to the gauze at the extremity, whence it is dispersed upon the diseased surface in a minutely divided and misty spring, and thus passes through the opening of the glottis during inspiration, without causing the slightest inconvenience to the patient. Mr. Thompson generally used a solution of nitrate of silver in the proportion of two scruples to an ounce

of distilled water. The instrument, it was stated, was to be had of Mr. Millikin, in the Strand.

Dr. MACKENZIE thought the principle of the instrument was much the same as that of one used in London, consisting of an India-rubber bulb with a catheter tube.

Dr. RICHARDSON said that the principles were different. In the India-rubber bulb instrument, the object was to apply a drop of fluid; in Mr. Thompson's instrument, the object was to charge air with fluid, like dew. He thought the apparatus one of the most rational he had seen for applying solutions to the larynx.

Mr. HENRY SMITH referred to the discussions as to the possibility of introducing caustic solutions into the larynx by the probang. He had seen it used in two cases in which the symptoms were much aggravated thereby. He had been called on to perform tracheotomy in one case in which the patient had laryngitis, but had not suffered much before the introduction of the probang. He doubted, however, whether the probang, charged with caused solution, was ever really passed into the larynx without aggravation of the symptoms. He thought Mr. Thompson's plan likely to be a great improvement.

Dr. HARE had been in the habit of applying the sponge to the larynx. This was quite apart from the question whether the sponge enters the part; but he had no doubt that a solution of nitrate of silver could be thus made to enter the larynx with benefit, in cases of aphonia, for instance. The effect has been too immediate to be explained in any other way than by the entrance of the fluid. The choking produced by the application is often apparently formidable; and Dr. Hare would not apply the caustic in a decidedly apoplectic person. He thought Mr. Thompson's plan a very improved one. There was no doubt of its being more pleasant to the patient; and the mode was also evidently more scientific, and likely to be efficient. He would suggest, however, that a smaller and cheaper apparatus might be contrived, which should answer the same purpose.

Dr. ROUTH suggested the application of the instrument to vaginal and uterine diseases, where it was required to inject fluids frequently, or where it was dangerous to do so. He thought that, by Mr. Thompson's instrument, fluids might be introduced to the mucous membranes of the uterus and vagina. The size of the instrument was its only objection.

Dr. GIBB had been in the habit of using the probang, and had repeatedly introduced it into the larynx.

Editor's Letter Box.

DR. BARKER AND MR. CHAVASSE.

LETTER FROM T. H. BARKER, M.D.

SIR,—With extreme pain and regret I have been obliged, within these last few weeks, to send in to Dr. Williams my resignation of membership of the British Medical Association. I have been so long a member of the Association, so long intimately connected with it in its struggles and its labours, and I have gained through it such close and valued friendships, that I cannot leave it without a word of explanation, and without asking my fellow-associates, in bidding them farewell, to forgive me any faults into which I may in haste have been led, for the sake of what good I have done, or, at all events, have tried to do, in the years that have passed.

Will you permit me, therefore, through the medium of your JOURNAL, to make a few observations, dictated solely by a conciliatory spirit, for the perusal of those of your readers who may have noticed and traced the progress of a dispute between Mr. Chavasse and myself, of which dispute my resignation has been the sole sequence?

Ten years ago, I published a small work *On the Management of Infants and Children*. In that work I quoted, from a work by Mr. Chavasse on the same subject, certain formulæ of infants' foods. I gave Mr. Chavasse full credit for these formulæ; and I never heard from him a word of complaint, although I met him, dined with him, corresponded with him on many occasions, and all with the utmost friendship and good feeling.

My book being out of print three or four years ago, I asked Dr. Richardson, then conducting the *Sanitary Review*, to allow a second edition of the book to appear in his pages. On condition that certain portions of new matter should be added, and some slight curtailing of old matter should be made, the editor of the *Review* accepted my papers, and they appeared in volumes II and III.

In preparing these papers for publication, I was accustomed to send up the printed matter, corrected, of the first edition; but I did not always, in receiving the proof, receive also the copy. It may be, therefore, from this circumstance, or it may be from an unintentional oversight on my part, that an omission, which I much regret, was made; the note in the first edition of my book, acknowledging Mr. Chavasse, was not repeated in the second edition; and, as I had sent the last copy of my first edition to the printer, the oversight never occurred to me until the hostilities which have happened between Mr. Chavasse and myself brought it out.

My book on the *Hygienic Management of Children* is a reprint from the *Sanitary Review*; and, owing to the omission of the reference to Mr. Chavasse in its pages, it gave him reason to suppose that I had intentionally and dishonestly printed his opinions and directions as my own.

This charge of plagiarism brought against me by Mr. Chavasse, shorn of all the extraneous matter which has been attached to it, is, in simple truth, reduced to the position described above. I am sure your readers, and all members of the medical body who have honoured me by the perusal of my various writings in the JOURNAL and elsewhere, will, on calm reflection, do my common sense not less than my honesty more justice than to imagine that I, or any one who, like me, had laboured for years by sound scientific labour to promote original investigation in the highest branches of medical science, would risk everything of reputation by intentional plagiarism of certain formulæ of foods for an infant. Sir, I assure you solemnly that I never by a thought ever intended to rob Mr. Chavasse of any credit belonging to him. Nay, I may add, that no one who could know us both equally well, our modes of thought, and (I say it without meaning to establish any comparison) our differences in scientific research, would accuse me of such a thought or act. Sir Benjamin Brodie himself would scorn not more than I to rob Mr. Chavasse of one printed line or suggestion.

But, in making this explanation, I do not attempt to defend myself from blame. I blame myself, in the first instance, for carelessness; and in the second instance, for hastiness of expression. The fact is, that Mr. Chavasse, without any previous information, set his lawyers upon me, with full power to do their worst; and I being in Switzerland and out of their way, he set them on my wife, who was much less able to make a defence. It is true, Mr. Chavasse has denied giving authority for this latter act; but, inasmuch as it is in his power to put his lawyers to a heavy penalty for exceeding their duty if they did exceed it, I hold him still responsible for the act in the strictest sense. Returning home, and finding the position in which my wife had been placed, I was not, I admit, sparing in my wrath (*ira furor brevis est*); I threw an amount of feeling into the subject, and wrote in a strain to Mr. Chavasse, which, not forgetting the provocation, is, in these calmer moments, a source of deep sorrow to me. I should have been "swift to hear and slow to speak". Most sincerely I beg to withdraw every expression which has been painful to Mr. Chavasse or to any one.

I should end here; but another event has taken place to which I must refer. The Committee of the South Midland Branch, of which I was President-elect, has taken up the subject in dispute, and come to certain resolutions which have left me no alternative but to resign my connexion with the Association. When I heard that the Committee had determined on discussing the dispute, I adopted, sir, a suggestion of your own. I offered the conciliatory plan of settling the question by arbitration; I proposed to the Committee to submit the entire affair to four members of the Association, of not less than five years standing, and known as having the honour and interests of the Association at heart—two to be chosen by myself, and two by Mr. Chavasse or the Branch, with Sir Charles Hastings as the umpire, if he would kindly consent to undertake the office. It appeared to me that this would have been the fairest course to pursue; but as it has been denied, and I have been virtually ignored—shall I say condemned?—on *ex parte* statements, by brethren nearest to me, and towards whose first gathering I took the initiative (for I did take the initiative in founding the South Midland Branch), I have resigned once and for all. To hold my ground would be to retain many warm friends, to secure enemies; to set these, on whichever side they might be, at variance; and to destroy a Branch which I aimed to establish for mutual good and mutual friendship.

In conclusion, I would remark that I have buried with the year which has just closed every harsh feeling towards every

one concerned in this dispute; and I wish the Association, and every member of it, an uninterrupted course of prosperity and peace. I am, etc. T. Herbert Barker.

Bedford, January 12th, 1860.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

* *In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Bloxam, Wm., Esq., Surgeon, Mount Street, W., on Jan. 9.
Gull, W. W., M.D., Finsbury Square, on Jan. 6.
Hillier, Thomas, M.D., Upper Gower Street, on Jan. 12.

Of daughters, the wives of—

*Barclay, John, M.D., Leicester, on January 12.
Griggs, W., Esq., Surgeon, Upper Tachbrook Street, on January 9. (Prematurely.)
*Nicholas, G. E., Esq., Wandsworth, on Jan. 13.

MARRIAGES.

Doherty, Hugh, M.D., of 2, Westbourne Park Place, to Elizabeth, widow of the late William Dakin, Esq., at the British Embassy, Paris, on Jan. 12th.
*Jones, Charles S., Esq., Chichester, to Anne, second daughter of Thomas Barber, Esq., Tulse Hill, at Brighton, on January 12.
*Lakin, J. H., M.B., Kineton, to Hannah, daughter of the late Josiah Robins, Esq., of Aston Brook, Birmingham, at Allesley, on January 17th.
Macdonald, Allan, M.D., Gallarie, Canterbury, New Zealand, to Mary A. F., youngest daughter of the late Alexander Grant, Esq., Dellachaple, Garmouth, N.B., on Jan. 14.
May, Frank, Esq., of Bristol, to Mary I. J., second daughter of James Boyd, Esq., late Superintending Surgeon Bombay Presidency, at St. Mary's, Bryanstone Square, on Jan. 14.
Sheppard, Walter G., Esq., South Street, Thurloe Square, to Hannah, widow of the late Rev. C. H. Bennet, rector of Ousden, Suffolk, at Brompton, on Jan. 4.

DEATHS.

Ayre, Joseph, M.D., at Hull, aged 78, on January 15.
*Blackall, John, M.D., at Exeter, aged 88, on Jan. 10.
Brady. On January 12th, at Brighton, aged 34, Sarah L., wife of John Brady, Esq., M.P.
Coulthred, James, Esq., Surgeon R.N., at 4, Mornington Crescent, aged 73, on January 12th.
*Dove, Harry, M.D., Tombland, Norwich, aged 41, on Jan. 5.
Edman, George A., Esq., Assistant-Surgeon Essex Rifles, and Medical Officer in the Royal Mail Steam Packet's Company ship *Solent*, at Colon, British Columbia, aged 42, on December 18th, 1859.
Griggs. On January 14th, at Upper Tachbrook Street, aged 35, the wife of Wm. Griggs, Esq., Surgeon.
Helsham. On January 9th, at Park Place, E., aged 6, Elizabella, wife of A. Helsham, M.D.
Ladd. On January 15th, at Lambeth, aged 2 years and 8 months, Clara Edith, daughter of Theodore E. Ladd, M.D.

APPOINTMENTS.

*Hastings, Sir Charles, M.D., D.C.L., appointed Deputy-Lieutenant for the county of Worcester.

PASS LISTS.

Apothecaries' Hall. Licentiates admitted on *Thursday, January 12th*, 1860:—

Catt, Alfred, Brighton
Collins, John B., Yapton
Jessop, T. R., Brighouse
Jones, Thomas, Brecon
Irvine, J. W., Lancaster
Starke, A. G. H., Honiton
Thomson, W. T., Guisborough

The following gentlemen also, on the same day, passed their first examination:—

Stillwell, James, London
Waterson, John, Birmingham

SENTENCES ON TWO CANCER-CURERS IN FRANCE.

Sentence was passed on Vriès, the "Black Doctor", by the Tribunal of Correctional Police in Paris, on the 11th instant. We give in full a translation of the judgment pronounced:

"As regards the accusation of swindling—

"Considering that it results from the investigation and pleadings that Vriès, by assuming the false quality of doctor of the faculty of Leyden, while he is devoid of even the most elementary notions of medical science, came to France after having made vain attempts to impose upon public credulity in England; that, after having profusely distributed prospectuses which announced that he had received supernatural revelations, and having thus acquired a notoriety favourable to the realisation of his plans, he, under the name of the 'Black Doctor', caused to be announced by a great number of publications that he had discovered in the tropical regions an infallible antidote, which he called 'the quinquina of cancer', and also other specifics against asthma, dysentery, and against the most serious maladies that afflict the human species; that, having succeeded by these means in procuring patients, he negociated by contract for considerable sums of money, of which he caused a portion to be paid before the treatment, either with the patients themselves, or with their relations, causing them to entertain the chimerical hope of a complete cure, of which he energetically affirmed the certainty;

"Considering that it results from the evidence of the medical men who have been heard, that Vriès is profoundly ignorant of the healing art; from that of druggists (*pharmaciens*), that the medicines he ordered them to prepare in large quantity were nearly all of a powerless and insignificant nature, and that thus he audaciously deceived the public by announcing and causing himself to be announced by all his confidants as a regenerator of medical science and a benefactor of mankind;

"Considering that there is no swindling more dangerous nor more deserving of the severity of justice than that which, speculating on human life, addresses itself either to the fear which suffering and death cause to the sick, or to the feelings of affection which animate their families, to obtain considerable pecuniary sacrifices by raising in them the chimerical hope that the sums paid in advance will be restored to them in case of failure—a restitution which in no one was made, except in one single instance, where Vriès affirmed the cure of one of his patients, who died;

"Considering that by these means Vriès has in less than three years caused to be given to him sums of money of greater or lesser amount by various persons, and notably by Carriguiry, 10,000f.; by Capelman, 7,666f.; by Mignot, 3,000f.; by Rougemont, 6,666f.; by Chardin, 1,600f., etc.;

"Considering, especially, that by falsely persuading the widow Riffet that he was instructed by M. and Madame Buch, to ask her to advance him on their account the sum of 1,000f., the price for the complete cure of their daughter, while she was not cured, and while her relatives refused consequently to pay to Vriès a sum for which they did not hold themselves debtors, he procured from the said widow Riffet the above-mentioned sum, and thus swindled a portion of the fortune of another:

"As regards the accusation of illegal practice of medicine and pharmacy and the sale of secret remedies—

"Considering that it is established that during nearly three years Vriès has illegally practised medicine, with the circumstance that he assumed the title of doctor, to which he had no right; that he likewise offended against the laws on pharmacy, by selling and distributing medicines without being provided with a *pharmacien's* diploma; that at the same time, he has prepared and sold substances not inscribed in the *Codex*, and having the character of secret remedies;

"Considering, consequently, that Vriès has rendered himself guilty of the offences provided for by articles 35 and 36 of the law of the 19 Ventose, year XI, 6 of the ordonnance of the 25th of April, 1777, 36 of the law of the 21 Germinal, year XI, and 405 of the Penal Code;

"For these reasons, it sentences Vriès to 15 months imprisonment and 500f. fine."

The sentence pronounced on another cancer-curer, who had carried on his practices at Toulouse, is given in the *Union Médicale* for January 12th. The accused was a man named Martinez, an *officier de santé*, and therefore a legally qualified

professional man in France. We give a translation of the judgment:

"Considering that, in regard to the acts of swindling attributed to Martinez, it appears from the investigation and the pleadings that, having been established seven or eight years at Toulouse, he has represented himself and announced himself in the newspapers as having a special power of healing or extirpating cancer, and has promised a radical cure to persons who have applied to him, although their disease had been declared incurable; considering that these false promises are doubtless insufficient in themselves alone to constitute the offence of swindling, but that they have always been preceded, accompanied, and followed, by fraudulent manœuvres, with the object of obtaining from the patients—first, the promise of important sums, and then their payment into his hands;

"Considering that, in fact, the investigation and pleadings have established—1, That Martinez, after having visited his patients, sought to terrify them, so as to force them to entrust themselves to his treatment, by telling them that their disease was incurable, that no other medical man could do anything, that he alone was sure of curing them, that he had an infallible remedy, a secret which he was on the point of selling to the Government; 2, that he represented himself as having performed numerous cures, the number of which, according to certain witnesses, he stated to be one hundred and ninety-two; 3, that he represented himself as medical attendant to the Queen of Spain, and a doctor of medicine, while he was merely a simple *officier de santé* recognised in France; 4, that, after having exacted from his patients the promise of large sums, sometimes amounting to 4000 francs (£160), he always caused half of the promised sum to be paid before commencing treatment, and stipulated that the second half should be paid on the performance of the cure which he promised; 5, that he took care, in the receipts which he gave, to mention that the second payment should be made on the extirpation of the cancer, thus preparing new manœuvres to obtain the second payment, even though the patients had not obtained the promised cure; 6, that the treatment which he caused to be undergone by the patients who had the misfortune to entrust themselves to him, consisted in the application of violent caustics to the affected part, causing them to suffer long and terrible agony, and destroying and hardening the flesh; 7, that he surrounded himself in mystery when he dressed the patients, desiring no person, not even their nearest relations, to be present—not wishing, as he said, that they should become acquainted with his secret; and that after some months of treatment, he simulated the removal of a cancer by lifting out a piece of the flesh of the part, or of the eschars, which he represented as the cancer itself, assuring the patients that all was completed, that the wound had only to cicatrise, that the process of cicatrisation was tedious, but that the cure was complete.

"Considering that in one instance (that of Madame Biane), doubts having been raised as to the pretended extraction of the cancer, Martinez rendered all verification impossible by making away with the bottle containing the substance which he had removed from the patient's breast; that he also threatened such patients as made an objection to paying because they did not consider themselves cured, that he would cease from his attendance on them;

"Considering that all the preceding facts constitute fraudulent means employed by Martinez, by the aid of which he caused to be paid to him, and endeavoured to obtain, considerable sums of money, and that he has thus committed the crime of swindling with which he is charged;

"Considering that the acts of swindling were committed to the prejudice of Mesdames Barrau, Thibaut, Biane, Roux, Bedoussont, Brachit, Calages, Pégourier, Prévost, Lamothe, Sabatier, Chartron, Laya, Bidou, and sisters Alexandrina and St. Louis, nuns;

"Considering that, although the facts relative to Mesdames Lamothe and Pégourier are of old date, yet those relative to all the other persons named above have been committed within three years, and fall within the application of the penal law;

"Considering, with regard to the accusation against Martinez of having committed acts of homicide, as having caused wounds by imprudence or neglect of rules, that it is ascertained that the treatment employed by him, in the cases of persons named above, caused them to experience unheard of and insupportable suffering, which must of necessity have an injurious influence on the health of the patients, of whom some have died, and others have survived, uncured; but that it is not sufficiently established that the treatment they received from Martinez produced death or wounds;

"Considering, with regard to the accusations of having violated the prescriptions of the code of medical police, that Martinez supplied the caustics which he applied to his patients, but that it is not established that he prepared them himself, and that he might have obtained them from druggists, as he has alleged; that, moreover, he did not sell them to the patients, and did not receive payment for them in addition to his charges for treatment; that, finally, it has not been proved he performed any surgical operation in violation of the law, since he confined himself to removing the masses of flesh that had been burned by the caustics which he used;

"For these reasons, the tribunal acquits Martinez of the accusations of involuntary homicide, or wounding by imprudence or neglect of rules, and of violating the regulations of the code of medical police;

"Finds him guilty of having, within three years, committed sundry acts of swindling, to the prejudice of the persons already named, by persuading them that he was a great physician, the possessor of a secret or an infallible remedy for extirpating and healing the most intractable cancers, which secret he even alleged he was about to sell to the Government; by causing them to believe in a cure, though impossible, and thus raising in them the hope of a success or of a chimerical event; and by also persuading them, in the course of the treatment to which he subjected them, that their cure was accomplished by a pretended extirpation of the cancer; and, finally, finds him guilty of having, by fraudulent means, caused to be delivered to him various sums of money, of which he has thus swindled the above-named persons, to their prejudice;

"In consequence, condemns Martinez to five years imprisonment, and a fine of one thousand francs."

MEDICAL SOCIETY OF LONDON. On Monday evening next, a paper will be read upon the Natural History, Properties, and Medical Uses of Sanguinaria Canadensis, by Dr. Gibb.

HEALTH OF LONDON—JANUARY 14TH, 1860.

[From the Registrar-General's Report.]

		Births.	Deaths.
During week	Boys.. 985 / Girls.. 953	1938 ..	1344
Average of corresponding weeks 1849-58		.1645 ..	1334

Among the causes of death were—bronchitis, 188; pneumonia, 120; phthisis, 140; small-pox, 41; scarlatina, 62; measles, 23; diphtheria, 7; hooping-cough, 31. The deaths from pulmonary diseases (exclusive of phthisis) were 346, being 36 above the corrected average. Of persons who died at the age of 80 and upwards, 9 were nonagenarians, and one a centenarian. Of bricklayers, 3 died in the week, of bricklayers' wives, 4, of bricklayers' children, 9; of carpenters, 6 died, of carpenters' wives, 5, of carpenters' children, 19; of masons, 1 died, of masons' wives, 2, of masons' children, 1; of painters, 10 died, of painters' wives, 2, of painters' children, 11; of plasterers' wives, 1 died, of plasterers' children, 8.

Barometer:
Highest (Sun.) 30·194; lowest (Sat.) 29·896; mean 30·032 in.

Thermometer:
In sun—highest (Wed.) 60·0 degrees; lowest (Tues.) 42·0 degrees.
In shade—highest (Sun. Th. and Sat.) 46 degs.; lowest (Mon.) 30·3 degs.
Mean—37·9 degrees; difference from mean of 43 yrs. +2.3 degrees.
Range—during week, 15·7 degrees; mean daily, 10·2 degrees.
Mean humidity of air (*saturation*=100), 93.
Mean direction of wind, S.W. and S.E.—Rain in inches, 0·07.

TO CORRESPONDENTS.

Communications have been received from:—MR. ROBT. WYNNE JONES; DR. A. T. H. WATERS; MR. ATHOL A. JOHNSON; DR. T. INMAN; DR. W. V. BIRD; MR. GEO. MALLETT; DR. B. W. RICHARDSON; MR. THOMAS HUNT; MR. T. HOLMES; DR. COCKLE; MR. WILLIAM MARTIN; MR. C. J. EVANS; DR. W. B. CARPENTER; DR. AGAR; and A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the Names of Members of the Association.*]

1. On the Coagulation of the Blood in the Venous System during Life. By *George Murray Humphry, M.D., F.R.S. Cambridge: Macmillan and Co. 1859.
2. On Chronic Alcoholic Intoxication; or Alcoholic Stimulants in connection with the Nervous System. With a Synoptical Table of Cases. By W. Marcet, M.D., F.R.S. London: Churchill. 1860.

ADVERTISEMENTS.

H. Silverlock's Medical Label Ware-HOUSE, LETTER-PRESS, COPPER-PLATE, & LITHOGRAPHIC PRINTING OFFICES, Wardrobe Terrace, Doctors' Commons, London, E.C.

H. SILVERLOCK'S stock of Labels for DISPENSING purposes having been recently revised and enlarged, now consists of upwards of 800 different kinds. Yellow and Green Labels for Drug Bottles, Drawers, etc., at per book or dozen; a Book, containing a selection in general use in Surgeries or Dispensaries, 10s. 6d.

Priced Catalogues of the above may be had, post-free on application.

PRINTING OF EVERY DESCRIPTION AT MODERATE PRICES.

Pepsine. — The Liq. Pepsiniæ, as

used and recommended by Dr. NELSON, can be had from Messrs. W. & C. R. TITTERTON, 6, Snow Hill, Birmingham.

S. Bowles (late Windsor & Co.), Phial

AND BOTTLE MERCHANT, Dealer in Druggists' Sundries, etc., 6, JAMES STREET, COVENT GARDEN, W.C. The cheapest house in London for every description of Medical Glass of the best quality. Samples and prices forwarded free on application.

Great Saving in the Purchase of

SIX GROSS of NEW MEDICAL GLASS BOTTLES and PHIALS, assorted to suit the convenience of Purchasers, at S. ISAACS & SON, Glass Bottle Manufacturers—London Warehouse, 24 and 25, Francis St., Tottenham Court Road.

6 and 8 oz., any shape, plain, or graduated	8s. 0d.	per gross
3 and 4 oz. ditto ditto	7s. 6d.	„
½ oz. Moulded Phials	4s. 6d.	„
1 oz. ditto	5s. 6d.	„
1½ oz. ditto	6s. 0d.	„
2 oz. ditto	7s. 0d.	„

NOTICE.—S. ISAACS & SON beg to return their sincere thanks to the Medical Profession for past favours, and beg to inform them that in consequence of the great increase in their business, they have removed to more extensive premises, and hope by adhering to their usual attention and punctuality to receive a continuance of their favours at their new London Warehouses, 24 and 25, Francis Street, Tottenham Court Road. Packages free. Remittance on receipt of Goods Post-office Orders payable to S. ISAACS and SON, at the Post Office, Tottenham Court Road. Bankers—Unity Bank.

TO SURGEONS, APOTHECARIES, AND DRUGGISTS.

Important Saving, by Prepayment,

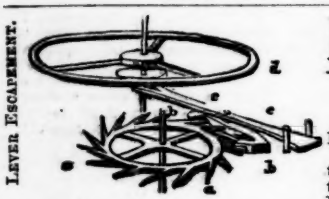
in the PURCHASE of
NEW WHITE ROUND MOULDED VIALS OF THE BEST QUALITY.

PELLATT and Co. submit the following PRICES of VIALS, for PREPAYMENT only:—

½ oz., 1 oz., 10 dr., & 1½ oz. per Gross,	6s.	In quantities of not less than Six Gross, assorted to suit the convenience of the purchaser; delivered to carriers in London.
14 dr., & 2 oz. „	7s.	
3 oz. „	8s.	
4 oz. „	10s.	
6 oz. „	15s.	No charge for Package.
8 oz. „	18s.	
4½ oz. graduated in 3 doses „	12s. 6d.	Breakage at risk of Purchaser.

The above Prices being based upon a calculation which excludes *all charges* whatever between the Manufacturer and the Consumer, no attention can be paid to any order not accompanied by a remittance in *full made payable in London*.—P. and Co. do not supply Green Glass.—Orders and remittances to be addressed,

PELLATT & CO.,
FALCON GLASS WORKS, LONDON.



BENSON'S WATCHES.

"Perfection of mechanism."
—MORNING POST.

Gold .... 4 to 100 guineas.
Silver.... 2 to 50 guineas.

Send two stamps for Benson's Illustrated Watch Pamphlet.

Watches sent free to any part of the kingdom on receipt of a remittance.——33 & 34, Ludgate Hill, London, E.C.—Established 1749.

For Varicose Veins and Weakness.

—Very superior SURGICAL ELASTIC STOCKINGS and KNEE-CAPS, on a New Principle, pervious, light in texture, and *inexpensive*, yielding an efficient and unvarying support, under any temperature, without the trouble of Lacing or Bandaging. Likewise, a strong low-priced article for Hospitals and the Working-classes.

ABDOMINAL SUPPORTING BELTS for both Sexes. those for Ladies' use, before and after accouchement, are admirably adapted for giving adequate support with EXTREME LIGHTNESS—a point little attended to in the comparatively clumsy contrivances and fabrics hitherto employed.

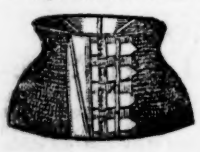
Instructions for measurement and prices on application, and the articles sent by post from the Manufacturers,

POPE and PLANTE, 4, Waterloo-place, Pall Mall, London.
The Profession, Trade, and Hospitals supplied.

J. & E. BRADSHAW, late

Shoolbred and Bradshaw,

34, JERMYN STREET, begs to call attention to the various improvements in PATENT ELASTIC STOCKINGS, BELTS, KNEE-CAPS, SOCKS, and Ladies' and Gentlemen's SPINE SUPPORTERS. A new description of BELT, invaluable for prevention of Cholera, and the cure of Rheumatism, Lumbago, etc. N.B. Every description of INDIA-RUBBER BANDAGE, vulcanized on the newest principle.



Directions for measurement sent by post—N.B. A liberal Discount to the Profession.

A female to attend on Ladies.

TO SURGEONS, DENTISTS, ETC.

The best House in London for

SECOND-HAND INSTRUMENTS is Mr. WM. LAWLEY'S, Lombard House, 78, Farringdon Street, City.

Established upwards of a Century.

A large Stock of New Instruments always on Sale, all warranted.
Instruments Bought, Sold, or Exchanged.
N.B.—The largest Stock of Second-hand Dissecting Cases in London.

CAUTION.

Chlorodyne. — Any Preparation

advertised or sold under the name of Chorodyne, other than Dr. J. COLLIS BROWNE'S, is not that recognised and prescribed by the profession, for which so great and valuable testimony is accorded, as published in the Medical Journals.

Dr. J. COLLIS BROWNE'S Chlorodyne is the *only* genuine, he having *alone discovered* and *named* this *new agent*, and confided its manufacture *absolutely, solely*, and *entirely* to

J. T. DAVENPORT, Pharmaceutist, 33, Great Russell Street, Bloomsbury, London.

N.B.—Medical Men are earnestly solicited to attach the words, Dr. J. COLLIS BROWNE'S Chlorodyne, when prescribing; also to observe that the signature of Dr. J. COLLIS BROWNE, in white letters on a red ground, is outside each bottle.

The spurious compounds sold under the name of Chlorodyne not only invariably fail to produce the extraordinary beneficial effects accorded to the genuine, but often occasion most serious results, and being a remedy so often resorted to in extreme cases, the life of the Patient and the credit of the Practitioner are at stake. The active principle of Chlorodyne has never been publicly intimated; its effects are quite dissimilar to Opium or its Salts. It relieves pain in any organ and from whatever cause. Spurious compounds will be sure to disappoint. Dr. J. COLLIS BROWNE'S Chlorodyne is the only genuine.

Williams and Son's Pure Glycerine

SOAP, analysed by Dr. HOFMANN, F.R.S., and PROFESSOR REDWOOD, Ph.D., strongly recommended by many eminent Members of the Medical Profession, and favorably noticed by the following Medical Journals.

The *British Medical Journal*.
The *Lancet*.
The *Medical Times and Gazette*.
The *Medical Circular*.
The *Edinburgh Medical Journal*.
The *Dublin Hospital Gazette*.

It is suited to all cases of delicate skin (whether arising from disease of otherwise), and is admirably adapted for nursery use. May be had of all respectable Chemists, Perfumers, etc.

SOAP WORKS, CLERKENWELL, LONDON, E.C.

Bass's East India Pale Ale,

AND

BARCLAY'S PORTER AND STOUT,

Always in good condition, Eighteen Gallon Casks, Bottles, Half-bottles, and Imperial Pints.

BERRY, BROS., and Co., 3, St. James's Street, London, S.W.

Mr. Bourjeaurd's Registered Spiral

ELASTIC COMPRESSIONAL APPLIANCES, to be obtained only at No. 11, DAVIES STREET, BERKELEY SQUARE, W., and at No. 11, RUE DES BEAUX ARTS, PARIS, and through Medical Practitioners.

THE IMPROVED SUSPENSORY BANDAGE.

Mr. BOURJEAURD, in submitting the accompanying Diagrams, presents his best thanks to the Members of the Medical Profession for their unceasing support of his invention of the Spiral Elastic Compressional Principle in Surgical Appliances, and for the continuance of innumerable recommendations in all parts of the kingdom, at the same time he feels it incumbent upon him to remind his friends, that this Invention was registered by him in February 1848, and, immediately after, advertised in the Medical Journals, thus affording an undeniable contradiction to the assertions of the unblushing appropriators of his principle, who have never appeared till within the last three and a half years, and yet style themselves Patentees, Registrars, etc., of the Spiral Principle. The advantage of qualifying antecedents, and being a Member of the Surgical Profession, have enabled Mr. B., by confining his attention to the superintendence of the manufacture and adjustment of his appliances, to attain great proficiency; and he considers it essential, especially in difficult cases, that patients should be attended by himself or his assistants, and if not practicable, by a Member of the Profession, as it must be admitted to be exceedingly hazardous for the suffering to entrust their limbs or cases of hernia to persons totally ignorant of anatomical or physiological laws.

The charges, estimating the amount of benefit afforded, are less than the prices of the imitations: Mr. B. invites an inspection, and of the certificates confirming his sole claim to the inventions.

N.B. No. 11, DAVIES STREET, near Mivart's Hotel. The Establishment is strictly private. At home from 10 till 6.